

The  
**HOW  
 AND  
 WHY**  
*Wonder Book of*

# COINS AND CURRENCY





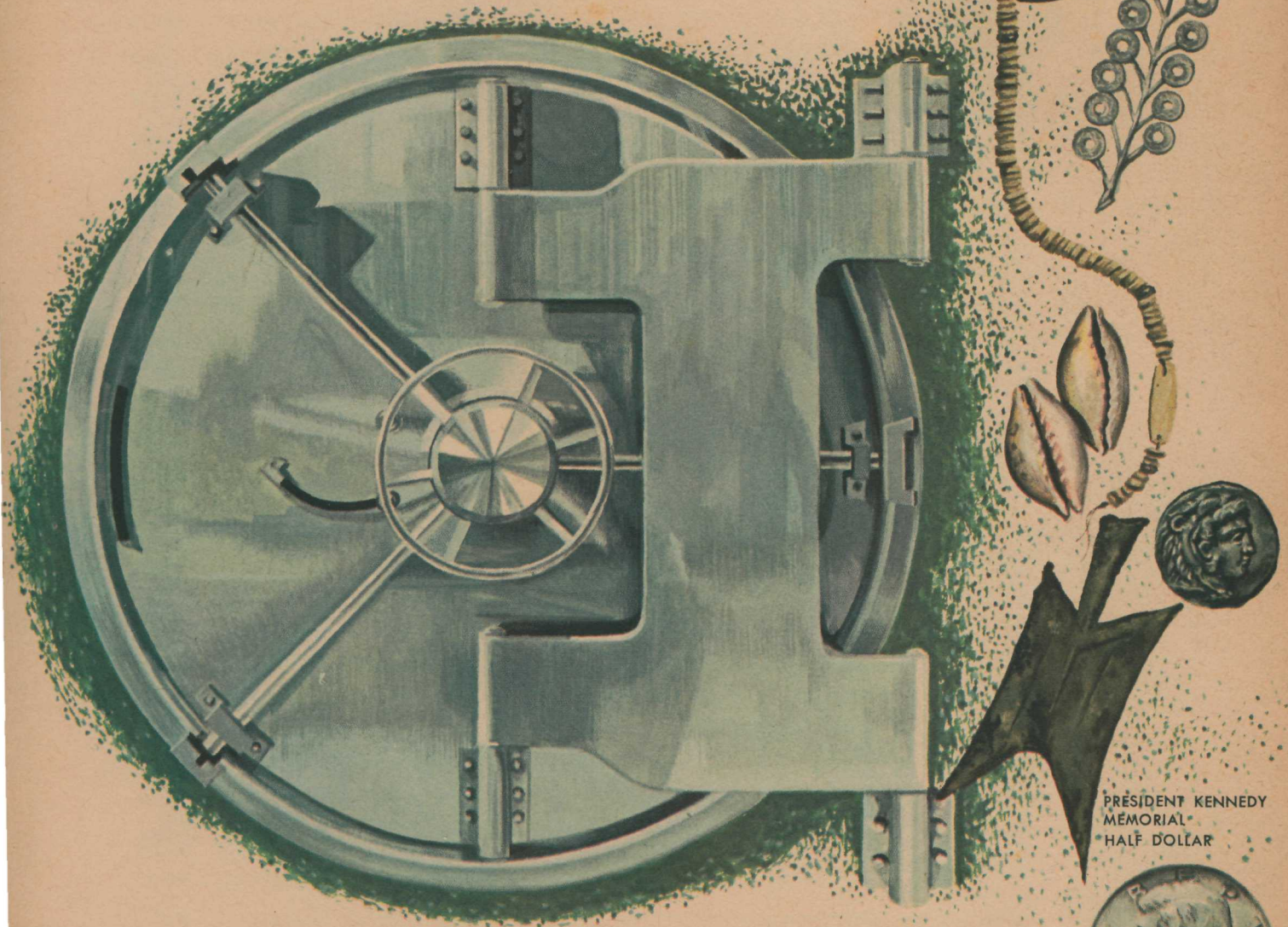
THE HOW AND WHY WONDER BOOK OF

# COINS AND CURRENCY

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PRESIDENT KENNEDY  
MEMORIAL  
HALF DOLLAR

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## Introduction

One of the interesting facts to learn from this *How and Why Wonder Book of Coins and Currency* is that many unusual things have served mankind as exchange through the ages. Cows, sheep, nails, or salt were once used as money! You will be even more surprised to learn that the feathered skins of woodpeckers' heads served as small change. And there was a time when so many whales' teeth closed a big business deal. Cowrie shells were carried around the world by sailing merchants because of their international value.

The main purpose of money has always been the same — to function as a medium of exchange. Money of itself has no real value. You can't eat it, wear it, or build a shelter with it. You eat food; you dress in clothing; and you build houses with lumber and bricks. The worth of money is in its acceptability as a medium of exchange.

How the money system of the United States has developed is a spell-binding tale sprinkled with bits of history, as reflected in stories of the "continental," the pine tree shilling, the greenback, and other monies. Changes in our money are still taking place.

This *How and Why Wonder Book of Coins and Currency* will guide you in your study of the different kinds of money. It is a most useful reference for any young person studying history, economics — or just reading for fun.

*Paul E. Blackwood*

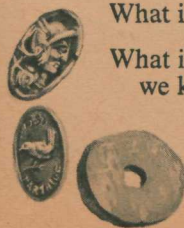
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In the ancient Greek world, Croesus, King of Lydia, was considered one of the richest men. His contemporary, Solon of Athens, a statesman, was considered one of the wisest men of his time. Shown below is the traditional encounter between the two with Croesus showing Solon his wealth and Solon telling Croesus that wealth is not happiness.



Everybody has his own relationship to money and uses whatever he owns accordingly. There are the misers who treasure it for its own sake and who will deny themselves the least pleasures that money can buy for the pleasure that hoarding it gives them; there are the spendthrifts who throw their money about without any thought of what will happen afterwards; and there is a full scale of other tendencies between these two extremes. There are proverbs and wise sayings galore about the subject from the Biblical "For the love of money is the root of all evil" to the popular "Easy come, easy go." There are a host of literature, legends in mythology, and tales from history aimed at making man see money in its proper perspective. It should always be only a means to an end; it can buy many things but not the highest values of mankind — friendship, love, and health, to name just a few.



All through the ages there have been responsible people, neither misers nor spendthrifts, who spent their money for the necessities and occasional luxuries of life and still saved some for a "rainy day." These early American piggy banks prove that children and grownups saved then as you should today.



In a primitive society, there is no need for money. If a person wants something another person owns, he has to get it as a gift or trade something else for it. Robinson Crusoe lived happily without money.



From Phrygia, an ancient country in Asia Minor, comes the legend of King Midas who received from Dionysus, the god of wine and drama, the power of turning into gold whatever he touched. What seemed a blessing became a curse when even the food he touched also turned to gold. Dying of hunger, he shook off the curse by cleansing himself by washing in the river Pactolus. The river actually became famous in history for the gold washed from its sands.

## The Nature of Money

Coins and currency — man's money — have interested man and influenced his works for centuries. They have appeared in many forms, served many uses, and contributed much to civilization. No one knows what form of money we shall use in the future. Perhaps our present system of money will be replaced by something newer, easier to handle, and more in accord with the needs of a highly mechanized space age.

Any article which is widely accepted in exchange for goods and services is considered money. The article, however, has to answer the following requirements: It has to be comparatively rare or obtainable only through some degree of effort; it has to be easy and pleasant to handle; it has to be generally attractive to the eye and preferably small enough to carry; and it has

### What is money?

to be recognized as money by at least two people, the seller and the buyer.

In our society, people prefer coins and paper notes, but beyond this preference, many people use money without having much idea of what it really is and what it does. As you read on, you will find a story filled with amazing facts and surprises.

The main purpose of money is to serve as a medium of exchange.

**What is a standard of value?**

Goods and services are exchanged for money, which, in turn, is used to buy other goods and services. It is called a medium because it is in the middle between the buyer and the seller and helps to make the transaction possible.

Besides serving as a medium of exchange, money also serves as a standard of value. It tells us how valuable an object is. Today, for example, a big house costs more than a small house because more labor and material go into it. As a result, the big house provides more comforts and conveniences. People are willing to pay more for it. If you actually buy the house, you and the dealer have agreed to place the same value on the merchandise. In the United States, dollars and cents are the standard by which the value of goods and services are measured. If you lived in England, you would buy things with pounds, shillings, and pence. Other nations have their own names for units of money. Germany, for example, has the mark; Mexico, the peso. Whatever name the people give their money — dollar, pound, mark, or peso — in each instance, it is the standard of value.

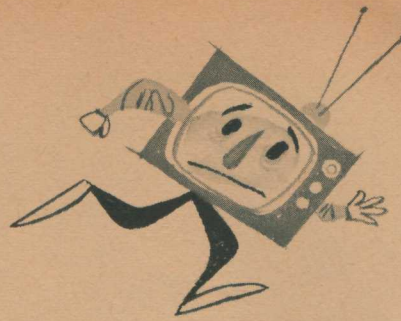
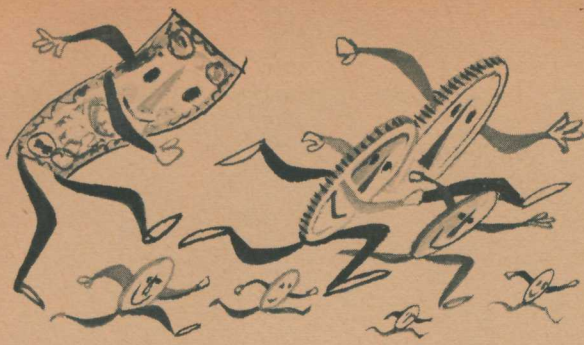
Money, of course, does not grow on trees — as you have probably been reminded by your mother or your father. If money were as easily obtained as leaves on branches, there would be so much of it that no one would value it. Whenever any kind of money is in too great abundance in relation to the amount of goods and services available, that money tends to be lower in value. If, for example, the supply of money were doubled, and the amount of commodities and services remained the same, then money would tend to lose one-half its value.

You doubtlessly have had an experience to show that the value of money does change. Perhaps you paid \$1.00 for a wallet. When, some months later, you tried to buy the same type of wallet as a gift for a friend, the price had gone up to \$1.20. The storekeeper explained that the higher cost of production and material had raised the price.

If prices go up, your money is worth less; if prices go down, money is worth more. Many factors affect prices. If stores are over-stocked with bicycles, the supply is too large and the demand too small. Under these circumstances, the dealer may lower his price.

Another factor that influences the value of your money is the supply of money itself. If the supply is increased in relation to the number of things to buy, we have what is called inflation. That is, prices are inflated, enlarged, or raised, just as a balloon expands when more air is injected. In time of war, when wages are higher and the supply of





Too much money chasing too few goods. Increasing wartime production increases wages without providing more goods to buy with the money. If not checked by government measures, this leads to inflation.

goods and services are limited, there is danger of inflation because there is too much money in relation to the goods and services available.

In times of depression, when jobs are fewer and wages lower, the supply of money in the hands of the people is smaller in relation to the amount of goods and services available. Prices tend to be lower, and we have what is known as deflation. Prices are deflated, or made smaller.

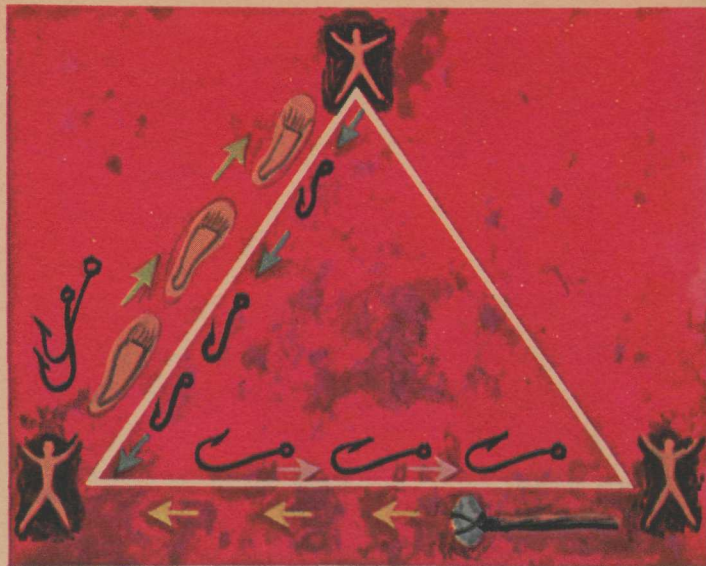
Many factors affect the worth of your dollar; we have named just a few.

Generally, people really do not want money. They want the things money can buy, goods and services that are useful to people. Modern money is thus a measure of wealth in the same way that a quart container is a measure of liquid. Present-day money represents wealth, but is not wealth in itself. The few pennies worth of paper used to make the bill, or the small cost of metal to make the coin, cannot be considered wealth. But we will learn that in the past, the things that were used as money were generally a form of wealth in themselves.

Today, our money is said to be property rights because the money entitles us to goods or property which somebody else is willing to give us for it.

Thus, although money is not a form of wealth in itself, it is a property right to wealth. And that is exactly what our dollar bills represent today: a symbol of wealth, not wealth itself.

It is true that under normal conditions, no one need go hungry if he has money in his pocket. But who would want to eat the money itself? Today, money is generally in the form of bills and coins. You cannot use them to keep you warm, nor will they shelter you from the cold. Picture yourself far from civilization, perhaps stranded in a desert. Your pocket might bulge with \$10 bills, or your purse be filled with silver coins. Could you satisfy your thirst because you had money? Would your money feed you, or protect you from the burning sun? Suppose a friendly native of this make-believe land finally discovers you roaming about in distress. You could, of course, offer your bills and coins for his help. But he would refuse to take these, because he has never seen such bills. His eyes might look with pleasure on some trinkets, or maybe a scout knife. For such articles, he might lead you to safety and help you to find food and water. The scout knife would have served the main function of money. It would have been a medium of exchange, a means by which you obtained what you needed with something which someone else could use.



Two-way barter, above left, poses no big problems. "A" has a fish and needs moccasins; "B" has moccasins and wants a fish; the exchange is easy enough. It becomes more complicated if a three-way transaction is required (above right). "A" has moccasins and needs an ax. "B" has an ax to spare, but needs fishhooks. "A" has now to find a "C" who has fishhooks and wants moccasins. He then will exchange his moccasins for "C's" fishhooks, and the fishhooks for "B's" ax.

## Money Long Ago

Centuries ago, money did not fulfill all the requirements which we expect of it today. Man's early money evolved gradually into modern money. In fact, long ago, there was probably no money at all, because there was no need for it. When a person wanted something from others, he had to receive it as a gift, trade something else for it, or take it without asking. Helping himself at the expense of others, however, was considered bad even by primitive man. Punishment was usually severe for the cave man who thieved.

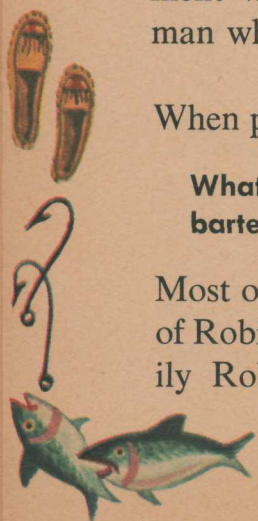
When people are self-sufficient, there is no necessity for money. In a simple society, people do not need too many things.

### What is barter?

Most of us are familiar with the stories of Robinson Crusoe and the Swiss Family Robinson, and how these people

lived happily without money. When there is no money, people exchange something that they own for something that somebody else possesses. Goods and services are exchanged for other goods and services without the use of an intermediary medium of exchange. This is called barter. The word, barter, comes from the Old French word, *barater*, which means to exchange or cheat. The second meaning probably refers to the fact that in trading of this sort, one person often gets a better bargain.

Barter, however, meant that if a person wanted to exchange a crude shovel for a pair of sandals, he had to find someone who owned the sandals and also wanted a shovel. In spite of its inconveniences, bartering continued for thousands of years. In fact, it continues to exist today among some African tribes who conduct their trade by bar-





Not just goods were bartered for goods, but often also services for services or services for goods. A soldier, for instance, might have obtained shelter, food, and clothing in exchange for protecting the trip of a merchant who had employed him.

Homer accounts that at the time of the Trojan War, about 1200 years before the birth of Christ, a golden armor was worth 100 oxen.

tering. A native will place a stalk of bananas by a river bank where it can be easily found by a fisherman who will leave a dozen mackerel in its place. The trade is made with neither trader ever so much as seeing the other.

We might very well imagine a man who had developed considerable skill at making moccasins. He finally specialized his efforts and devoted all his time to making moccasins, thus producing an excess of what he needed for his own use. He would then have to find a way

of using the moccasins to get other things that he needed.

Sometimes, in order to trade at all, he was compelled to accept, in exchange for his moccasins, some article that he did not need but that another person might want. Through the use of the moccasins as an intermediary article, he could finally get the things that he really wanted. A series of such three-party transactions might well have established one article in a community as a widely acceptable means of exchange.

## MONEY MATERIALS — COMMODITY MONEY

As we have said before, in different places some things came to be worth more than others. They were valued because of their usefulness, their beauty, or both. It was easy to exchange them. They became the standard of value and were used much as money is used today. Such things are called money materials, or commodity money. Let us now have a look at what these money materials were.

For centuries, men have depended on farming and domesticating animals for their living. A man who owns cattle could make use of them in many ways. Cattle pull heavy weights, are useful in farming, and give milk. Their skins provide material for clothing, tools are made from their bones and horns, and their meat can be eaten. So it is not surprising to learn that, relatively early, cattle became a money material. A certain number of oxen would buy a certain amount of land, tools, or utensils.

The Greek poet Homer, who wrote the story of the ten-year Trojan War (about 1200 B.C.), recorded oxen as the measure of value — a suit of armor was worth quite a number of oxen. In early Egypt and Crete, sheep were used as a medium of exchange, and the ancient Hebrews measured wealth in flocks and herds. One ox equalled ten sheep; the sheep were used to make change. In early Rome, also, livestock became a medium of exchange.

What was  
"living" money?

farming and domesticating animals for their living.

Even when metal coins became popular, many of the early coins had pictures of bulls and cows on them. Sometimes, the coins were in the form of an animal or looked like a part of an animal. One coin, a valuable collector's item from the southern part of France, has the form of a ham. When the Egyptians started to use gold instead of cattle, they shaped the gold into the form of small sheep. But for a long time after coins had become the medium of exchange, livestock still was used for the same purpose.

In twelfth century England, the days of Robin Hood and the villainous Sheriff of Nottingham, the average man might spend a lifetime without seeing any coined money. He would barter his crops and animals for other foods and clothing, and he would pay his taxes to the king in sheep or horses. The king's favorite tax collections were palfreys (saddle ponies), destriers (war horses), liveries (carriage horses), and sometimes hunting falcons.

This was known in monetary history as "living" money, or payment in kind. Whatever it was called, it was unquestionably cumbersome to handle. You can well imagine that there were other disadvantages in using animals as money. For one thing, you had to feed your money. You had to provide pasture for it. It could be attacked and devoured by wild animals. During the night, your money could even run away.

The word, pecuniary, which refers to money matters, comes from the Latin word, *pecus*, meaning cattle. The English word, fee, meaning payment for services, is closely related to the German

word, *vieh* (pronounced fee), meaning cattle. You can see that "living" money must once have had great importance all over the world.

For the same reason that cattle and sheep became so easily used as a medium of exchange, tools for farming became prized possessions, and thus a standard of value. Just as the coins of later Greece and Rome remind us of the cattle money, the early Chinese coins, which were in the form of shovels and knives, remind us of the tool money. They represent actual tools which were originally valued as money. But we do not have to go as far back as the ancient Chinese to find useful tools being used as money material. Whenever and wherever men have to fight hard to live, the most needed things become those which are valued the most. That is why nails became money for the early settlers of America. Nails, which at that time had to be made by hand and shipped from Europe, were worth a great deal. A settler who owned nothing but a keg of nails was considered a wealthy man!

On the west coast of Africa, in Cameroun, miniature iron spears about thirty inches long are used for money and are known as "wife" money. About a dozen spears are the purchase price for a wife. Smaller spears,

At right, early metal "money," tokens which remind us of the times when the things they represent were actually used to barter.



RECTANGULAR COIN FROM LUCANIA, AN ANCIENT REGION IN SOUTH ITALY



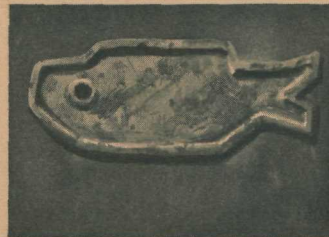
GREEK COIN WITH PICTURE OF BULL



COIN FROM NÎMES, SOUTHERN FRANCE, IN THE FORM OF A HAM



BRONZE COIN FROM MYCENAE IN THE SHAPE OF THE SKIN OF A COW



CHINESE FISH MONEY



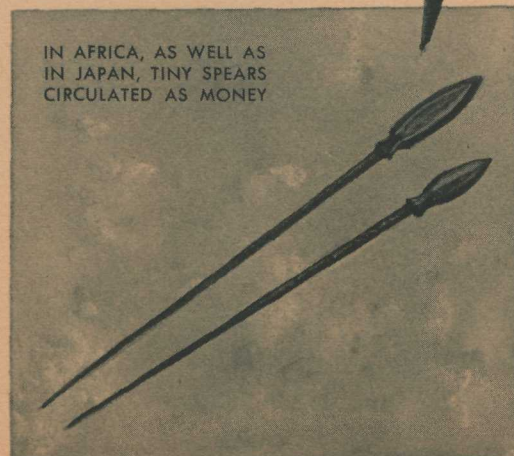
CHINESE DRESS MONEY



CHINESE KNIFE MONEY



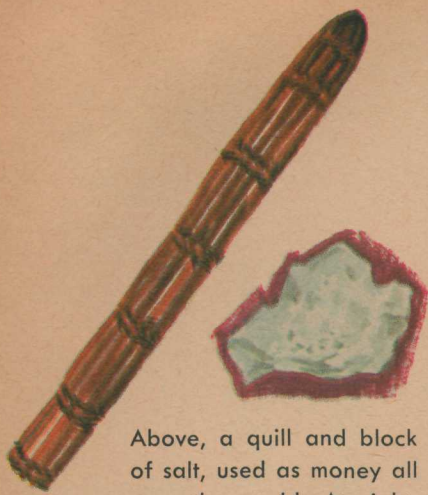
CHINESE SPADE MONEY



IN AFRICA, AS WELL AS IN JAPAN, TINY SPEARS CIRCULATED AS MONEY



NAIL MONEY



Above, a quill and block of salt, used as money all over the world. At right, Roman soldiers receiving "salarium."



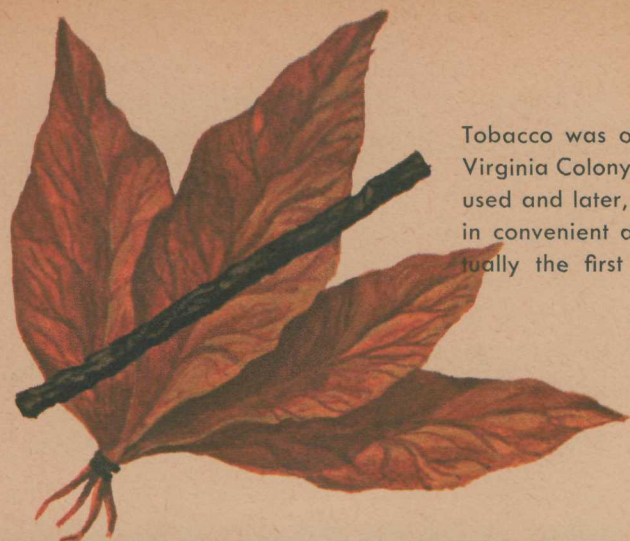
which range in size from about four to twelve inches, are used for smaller purchases. Most likely, the money began as real spears, a valued possession which the natives used as a medium of exchange. Over the years, they became smaller and easier to carry until they were useless as weapons. But their use as a medium of exchange remained, and this is what they are today — money material. A few generations ago, in the South Sea Islands, coconuts were the medium of exchange. You had to give ten thousand coconuts to get a wife in return.

One commodity that has been used as money by a great many people at different times in different parts of the world is salt. Even today, in some parts of Africa, blocks of salt are used as money. In India in the ninth century, salt was so scarce that it became more precious than the fabled Indian sapphires. Many people have experienced the suffering caused by a lack

**What kind of money is edible?**

of salt. This mineral is a most important item in the diet of man and beast. It is not only a necessity for the health of an individual, but is valued as a seasoning for his daily meals. Before the day of modern refrigeration, salt was also used as a preserver of foodstuffs. Salt, as an Indian money form, was packed in "quills," bamboo tubes of varying lengths and sizes. The size of the quill determined its value.

About the first century A.D., salt was scarce in the Roman Empire. Mankind had not yet found a way to extract it in sufficiently large quantity from the earth or from the sea. The Roman soldiers of that time were often paid a *salarium* — salt money. From the Roman *salarium*, we get our modern word, salary, and "He is not worth his salt" literally means a man does not earn his wages. In ancient Ethiopia, salt was also used as money. It was the custom when meeting someone, to offer your money to be licked as a sign of friendship, And, of course, a man's money soon disappeared if he had too many friends!



Tobacco was once the legal tender of the Virginia Colony. First, the actual leaves were used and later, tobacco warehouse receipts in convenient amounts. The latter were actually the first paper money of America.



COCO BEANS

CORTEZ ENTERING ONE OF MONTEZUMA'S TREASURE HOUSES



AZTEC COINS

Gold coins were known in the Aztec Empire of Mexico; Hernando Cortez extracted a million gold pieces from Montezuma, the Aztec ruler. Coco beans, however, were the common currency.

The fate of another commodity money, tobacco, is interesting. In the early days of Virginia, tobacco became such an important product that it was actually made legal money by the Virginia Government. That is, the government accepted tobacco in payment of taxes and other fees. After several years, everybody in the country was growing his own patch of "money" in the backyard. Inflation set in, and tobacco lost its value as money, but as a consolation prize for the owner, it still could be smoked.

**What kind of money went "up in smoke"?**

Hernando Cortez had heard stories about the gold and silver treasure of the Aztec Indians, and in 1519, he set out to conquer Mexico. To get possession of these fabled treasures was sufficient incentive for the Spaniards to risk money and men in Central America. Cortez succeeded with deceit, treachery, and superior weapons in defeating the Aztecs and taking their Emperor, Montezuma, prisoner. At last, he was able to enter the Aztec treasure storehouses! He found some gold and silver pieces, and some priceless gems. But the bulk of Montezuma's

**What was the Aztec treasure?**

about the gold and silver treasure of the Aztec Indians, and

treasure was in the form of thousands of coco beans, which the Indian Emperor had received as tribute from the provinces that he had conquered. For the Aztecs, the coco bean was money, and more valuable than gold and silver. The beans were very convenient to handle, relatively durable, and had food value. They were so highly valued as a medium of exchange that some dishonest persons even tried to counterfeit them. They would make imitations out of clay, varnish them, and try to pass them on for real coco money. The largest money unit was a sack of some twenty-four thousand beans. It surely contained enough "small change" for the transactions of everyday living!

An explorer reports that as recently as the thirties, he paid his carriers with tea-tiles during his travels in Tibet, China, and Mongolia. Tea-tiles, which are still used in these countries today, are money in the form of tea tablets. The actual tea money, in spite of its weight and inconvenience, is still used for figuring and concluding business transactions. Tea money is in bricks made of tea leaves weighing two and one-half pounds. Four bricks make a packet. A camel might cost twenty-two packets and three bricks.

Down through history, fishhooks, hounds, hawks, grass mats, silk, beaver, and coon skins have been used for money. The peoples of Eastern

**What kind of money can be brewed?**

**What other useful things were money material?**

Europe used fur as a medium of exchange up until the Middle Ages and even to the beginning of the sixteenth century. In Old Russian, the word, *kuny*, means money, and also means marten, a little fur-bearing animal with a valuable skin. In Finnish, *raha*, the squirrel skin, is the word for money. Money material was used until the beginning of the nineteenth century in many countries, in addition to coined and printed money. Services were very often paid for in money, plus a certain amount of wine, potatoes, corn, or wood, depending on the value of the commodity in the specific location. In Europe, after the First and Second World Wars, when food and luxury items became extremely scarce, cigarettes, butter, eggs, and nylon stockings replaced currency. Ten candy bars and a package of cigarettes bought a wrist watch, and a pair of nylons bought haircuts for every member of a large family.

We have talked about useful things that were used as money materials, but the useful things are not always valued the most. When people in a certain area have enough of the things they need, they want pretty things and value them more than the useful ones. In warm countries, for instance, where nature takes care of the primitive needs of man by giving fruit in abundance and only the simplest clothes and shelter are needed, man desires most the things that are hard to get — ornaments or materials from which ornaments can be made. Feather money is used by natives of certain South Sea islands. Feathers that are

**What is shell money?**



extremely difficult to get or especially colorful feathers are worth more than others. On other islands, the feathered skin of the heads of woodpeckers is used for money, or whales' teeth or ivory or jade. On New Guinea, shark's tooth money, which the "rich" wore on strings around their necks, was used. But more than anything else, shells have been used for money. Of the many kinds of shells that have served this purpose, cowrie shell money has had the widest circulation. The little cowrie, an ornamental shell, spread as money from China and India eastward to the islands of the Pacific Ocean, and became a medium of exchange in many parts of Africa and even the Americas. Cowrie money still circulates today among the Dahomeans on the west coast of Africa. The only form of money that ever gained international usage was this delicate pea-to-walnut size sea shell that was carried around the world by sailing traders.

In some countries, even when metal coins were already in existence, cowrie shells were preferred. They were cleaner and more pleasant to handle, impossible to counterfeit, and had the added value of a reputation for supernatural qualities. This made them ideal in some regions as magical charms and amulets which, as was superstitiously believed, protected the owner from evil.

The counterpart to the cowrie of the East was the quahog shell found on the Atlantic coast, which served the North American Indian as money. The shell was used either loose, or in strings. After beads were made from

**What was wampum?**

East was the quahog shell found on the Atlantic coast, which served

the shells, they were strung in many designs on belts, necklaces, and bracelets. Quahog shells and beads were white, purple, or black and the darker they were, the more valuable they were considered. Wampum, the name for the shell and the money, comes from an Indian word, *wampumpeag*. When the early settlers came to America, they started to use the wampum, not only in their trade with the Indians, but for many transactions among themselves, as well. It is told that often the Indians traded wampum for coined money, but not to use the metal money to buy goods. They decorated their squaws with strings of white man's coins. As the shells were very hard, it took quite some labor to make the beads. The use of wampum as money started to deteriorate when, in 1760, an enterprising settler started a wampum factory in New Jersey where expert workers produced the beads wholesale on a mass-production scale. As usual, the abundance of the medium of exchange, and the fact that it was now easily available destroyed its value as money.

Up to now, we have heard about things

**What was unusual about the stone money of Yap?**

that were offered and generally accepted as money — commodities

that could be used as food, or were valued as tools, implements, or ornaments. One kind of money that does not answer any of these descriptions was the money of Yap, one of the Caroline Islands in the Pacific Ocean. Made of limestone, Yap money looks very much like a millstone with a hole in it, and ranges in size



INDIAN WAMPUM



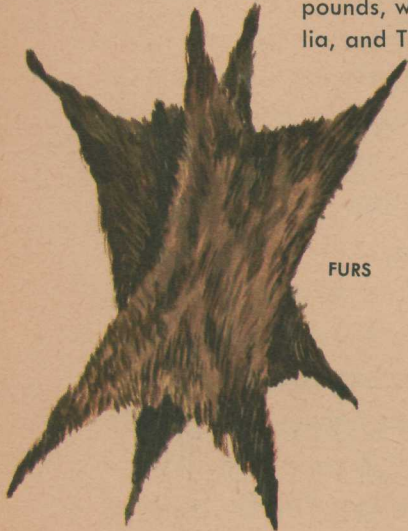
ALASKAN FISHHOOK MONEY



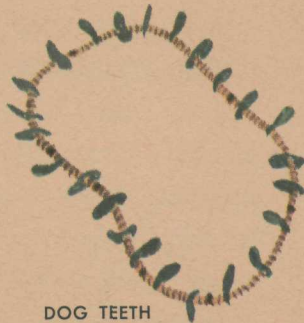
Bricks of tea, weighing about 2½ pounds, were used in Siberia, Mongolia, and Tibet as money.



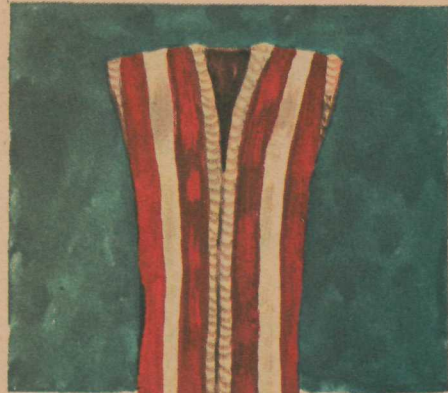
Rare feathers and feathers woven into belts of various length were used as a medium of exchange. There is, in the Chase Manhattan Money Museum in New York, a double-coil band from the Santa Cruz Islands which measures 27 feet in length; it is woven from the red feathers of some 500 tiny honey-birds. Feather coils were used for the more important purchases, such as canoes and wives.



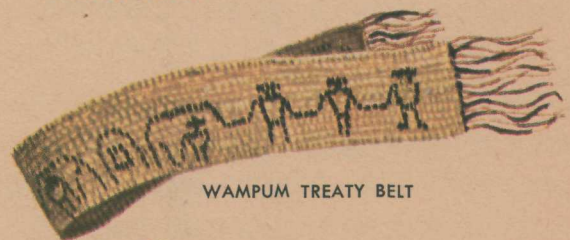
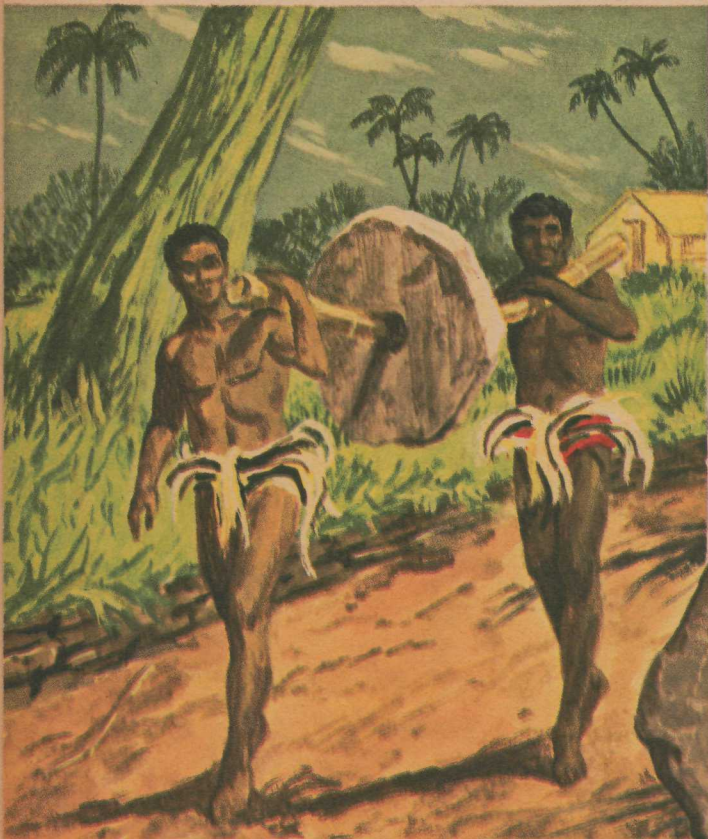
FURS



DOG TEETH MONEY, SOLOMON ISLANDS



The above jacket, which is also in the Money Museum in New York, contains about 2600 strings of beads. It was made in the early 19th century by the Tyal tribe of Formosa. Jackets like the one shown were used to purchase wives and cattle. The person who wore the jacket could also tear off strings of beads and spend them for purchases of lesser value.



WAMPUM TREATY BELT



Stone money from the island Yap. Size and color determined the value.



COWRIE SHELLS

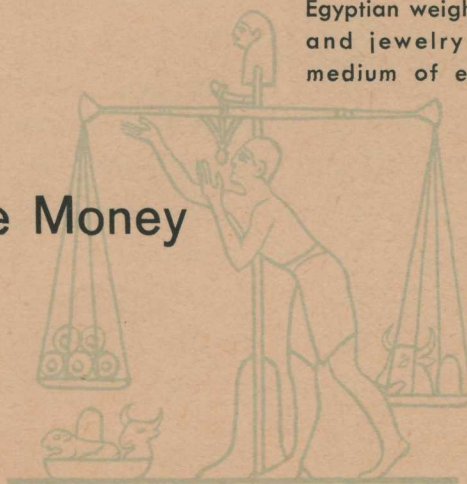
from a doughnut to a wagon-wheel. The value of these stones was not in the usefulness of the material, in their ornamental value, or in their easy handling. The inhabitants of the island valued their possession because it was difficult to get the stones and because they attributed supernatural powers to them.

The particular limestone for the money could not be found on the island of Yap, but had to be quarried on the Palau Islands more than three hundred miles away. The heavy stones had to be transported to Yap on rafts. They had to be worked, without being broken, into their round shape. The hole in the middle, which is used to carry the money on a pole, had to be drilled. They had to be polished. All this had to be accomplished with crude and simple instruments. Many a raft was lost in the crossing of the open sea.

The chief of the village usually took the largest and best stones and put them

in front of his hut as tokens of his power and might, and to please the gods. What remained from the transport was used to buy allies in case of fighting. Ransom was paid with the stones. In fact, no really important transaction took place without some stones changing possession. Since it was difficult to transport the stones from one place to the other, they very often stayed with the original owner. It was enough that the new owner knew "his" stone, and everybody else was informed whose treasure it was. The big stones, which were used only for big and important transactions, were often referred to as "men's money," while the women used the smaller stones or easier to carry shell money for their "market transactions." The value of the Yap stones lay not only in their size, but in the color of the stone and its age, as well. The older the "wheel," the more power it possessed and the higher was its value.

Egyptian weighing metal and jewelry used as medium of exchange.



## Metals Become Money

Nobody really knows who first used metals for money. Metals answer ideally to all requirements we have said a medium of exchange should have. They greatly exceed in convenience all money materials we have discussed. Animals need to be fed and cared for. Tools lose some of their value through wear and tear, or by becoming obsolete. If you ex-

amine all money materials we have discussed, you will find that they are clumsy media of exchange, sufficient for primitive communities, but handicaps when trade becomes really complicated.

With the passage of the centuries, metals became increasingly preferred over other commodities as media of exchange. It was easier to carry pieces of precious metals in one's pocket than to herd oxen. Metal could also be divided into smaller pieces; it lasted longer than many other money materials; and it was comparatively easy to recognize. The precious metals, gold and silver, were not the only metals that were recognized as media of exchange. Copper, brass, bronze, and iron, all became media of exchange, a measure of value, money.

At first, metal money was in the shape of lumps and bars, or dust, or sometimes ornaments like rings or bracelets. Each time it was used in buying or selling, it had to be weighed or measured.

We do not know exactly where and when metals were first used as money. We know that the use dates far back in history, even if it was not universal or exclusive. The Old Testament (Genesis 23:16) tells us that "Abraham weighed to Ephron . . . four hundred shekels of silver, current money with the merchant." This was to pay for a burial place for Abraham's wife, Sarah, about

**What kind of metals became money?**

**When were metals first used as money?**

became increasingly preferred over other commodities as media

when metals were first used as money. We know that the use dates far back

three thousand years ago. The shekel was an ancient weight unit used particularly by the ancient Hebrews. As a money unit, it could be gold or silver.

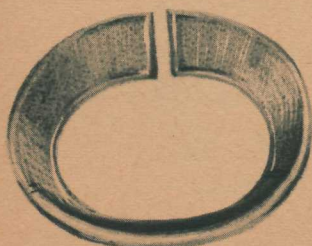
Historians tell us that cubes of gold and silver, valued according to their weight, were also used in Egypt and China as early as 2500 B.C.

In ancient Rome, before 300 B.C., copper was used for making pots. These were so popular with the citizens

that they were used as exchange for other goods. Thus, in the natural process by which a commodity begins to function as money, copper, also, became a medium of exchange. A way had been found to extract this metal from the island of Cyprus in the Mediterranean Sea. The island got its name from *kypros*, the Greek word for copper. Copper was the first metal extensively used by man for making tools because, like gold and silver, it is often found in a pure state in the earth. As it is a relatively soft material, it can be beaten into shape without heating. Thus, copper was greatly valued as a commodity in itself.

Again, nobody knows when, instead of the copper pots, strips of copper, called *oboli* in Latin, were offered as money. We do not have even a definite

**EARLY MONEY FROM EGYPT, ASIA MINOR, AND THE LANDS OF THE BIBLE.**



EGYPTIAN GOLD RING MONEY, ABOUT 1000 B.C.



DOUBLY MARKED ELECTRON, ABOUT 700 B.C.



LYDIAN ELECTRON (ABOUT 560 B.C.) OF KING CROESUS; WITH HEAD OF A LION FACING HEAD OF A BULL

PERSIAN GOLD COIN (5TH CENTURY B.C.) SHOWING KING CYRUS WITH BOW AND ARROW



idea of the size of the strips, except for ancient records mentioning that six *oboli* made a "handful." About 300 B.C., weights of copper (and sometimes bronze, a mixture of copper and tin) representing the actual value of the metal at that time became money. The weights were the *uncia* (ounce); the *aes*, weighing about twelve ounces; and the *semi* (half), weighing half the weight of the *aes*, or six ounces.

In Rome, copper continued to be the most popular medium of exchange until the island of Cyprus mined it in such vast quantity that it became over-plentiful. Copper then went down in value because of the abundant supply in relation to the goods and services available. The result was that a Roman going to market might have to load down his donkey with pieces of copper or bronze in order to buy his needs for a feast day. With the loss of the value of copper, silver and gold became the medium of exchange.

In A.D. 800, Charlemagne, the first Emperor of the Holy Roman Empire, decreed that the basic monetary unit should be one pound of silver, divided into two hundred and forty subdivisions called *deniers* after the old Roman money unit,

**How did some world currencies get their names?**

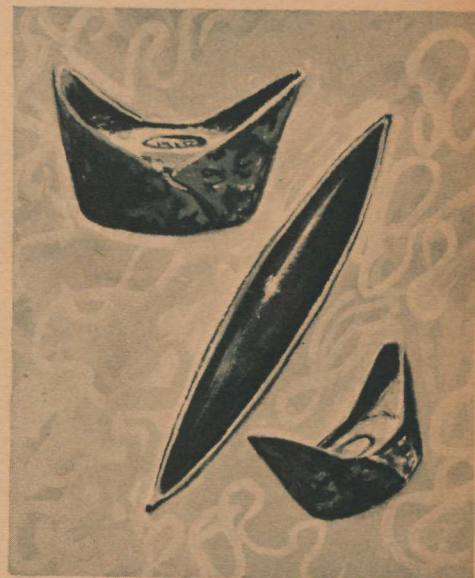
peror of the Holy Roman Empire, decreed that the basic monetary unit should be one

*denarius*. What is France today was then a part of the Holy Roman Empire, and in the French language, the word for money is *argent*, from the Roman *argentum*, meaning silver.

Have you ever wondered why the English, whose units of money today are the pound, the shilling, and the pence, write, for instance, one pound, four shillings, and five pence as 1£, 4sh, and 5d? The £ is a derivation of L., the Roman abbreviation for *libra*, meaning pound (silver); the "d" is an abbreviation for the *denarius*, the money unit brought by Roman soldiers occupying the British Isles.

The shilling, however, seems to have a different geographical origin. It is claimed that shillings were parts of metal rings and ornaments (*schellingas*) used as a medium of exchange by the Norsemen, the original inhabitants of what is

Pure uncoined silver ingots passed as money in China (from 1259 to 1933) and other Asian countries. The ingots in China were in the forms of boats or shoes; in Siam, however, they were shaped like canoes. The value depended on the weight.



BRONZE SHEKEL, OBVERSE

BRONZE SHEKEL, REVERSE



SILVER SHEKEL, OBVERSE

SILVER SHEKEL, REVERSE

Left, bronze shekels, originally thought to date from 142-135 B.C., just before the Maccabean uprising, and, right, silver shekels. Scientists now believe that both these coins from the Holy Land date from A.D. 66, the time of the first revolt of the Jews against the Romans.

today Scandinavia. They had also traveled over the sea and visited the British Isles.

We have mentioned that each time a quantity of metal changed hands, it had to be weighed or measured. With the primitive balances and weights, this was not the fastest way to conclude a bargain. Besides that, there were always people who tried to cheat by giving wrong weights. With the development of the "coin," which made cheating more difficult and weighing unnecessary, the long way from barter to modern money actually had reached its last phase. The invention of the coin, like many other important inventions, is attributed to the "Fertile Crescent," the crescent-shaped region in Asia which is considered the cradle of Western civilization. As early as 700 B.C., the trading peoples of the coastal regions, mostly Greeks, had used small lumps of an alloy of gold and silver for money. These yellow pieces of metal, found in the river and mountains of the countryside, were called *electron* after

**How did metal coins develop?**

the Greek god of the sun, Helios Elector. It is believed that about 700 B.C., some clever merchants decided to mark the gold beans that came into their hands, after having weighed them and found the weight conformed to specification. Then they would be used again to buy other goods. In this way, the merchants saved themselves the trouble of weighing the same pieces when they again came into their hands. Soon, other merchants, trusting the honesty of the well-known merchants, accepted the marked pieces at "face value," without checking the weight.

While these marked electrons can be considered the first step in the development of modern coins, the first real, if primitive, coins were made by the Kings of Lydia about the same time. The King of Lydia, an ancient country in what is today part of Turkey, owned all the gold and silver of the country. He kept his treasured metals hidden in his palaces, and used the electrons to pay his soldiers, make allies, buy goods, strengthen his power, and enlarge his empire. Following the example of the Greek merchants, he marked his elec-

**EARLY GREEK COINS.**

MACEDONIAN SILVER STATER, BEGINNING OF 5TH CENT. B.C.



SILVER STATER, ABOUT 600 B.C.



SILVER DECADRACHM, SYRACUSE, 4TH CENT. B.C.

OBVERSE



SILVER STATER, CORINTH, ABOUT 300 B.C.



REVERSE



SILVER TETRADRACHM, ATHENS, ABOUT 470 B.C.

OBVERSE



REVERSE



OBVERSE



REVERSE

TETRADRACHM WITH HEAD OF ALEXANDER THE GREAT, THRACE, ABOUT 290 B.C.

EARLY ROMAN COINS

DENARIUS SHOWING ROMAN CITIZEN VOTING



A BRONZE AS WITH HEAD OF GOD JANUS ORIGINALLY WEIGHED 12 OUNCES (336-280 B.C.)



DENARIUS, 187-175 B.C.



BRONZE SESTERCE WITH COLLOSEUM (A.D. 1ST CENT.)



DENARIUS WITH HEAD OF TIBERIUS (A.D. 14-37)



AN AS (NERO) SHOWING VICTORY FLYING (A.D. 54-68)



SILVER DENARIUS, 2ND CENT. B.C.



ROMAN COIN STRUCK IN BRITAIN (A.D. 293-296)



Early coining: The bronze die for obverse side (the side which bears the principal design) was set in an anvil and the die for the reverse side (the opposite side) was set in a punch. One person would hold, with tongs, a heated silver disk between anvil and punch; another, holding the punch in one hand, would strike it with a hammer and so force the design into the silver.

trons with his coat of arms — a head of a lion with open mouth — on both sides of the piece of metal. First, the city states of Greece in the coastal regions of Asia Minor; then, Greece proper, followed the King's example.

These early coins were still very much unlike our coins today. They were not evenly formed, round, and flat, but uneven, oval, or rectangular, and not one is identical to the other. But the guarantee for their weight and contents of precious metal, which they received with the seal of the King or the government, made them the ancestors of modern money.

With the invention of the coin, the right to make money changed from the individual to the government, be it king, city, or state, and the right to make money became, and still is, a token of sovereignty.

It is interesting to note that the last King of Lydia was Croesus. He was the first to have coins made of gold and silver at the same time. He conquered the Greek city states on the coast of the

Aegean Sea, took over the right of making coins, and taxed the Greeks so highly that he became one of the richest men of his time. Today, his name is still a synonym for wealth.

Croesus' wealth could not prevent the end of Lydia. In 546 B.C. he lost his life and his country in a battle with Cyrus I, King of Persia, who took over the right to make coins. In Persia, up to the

Whose portrait was first used on a coin?



This 10-drachm Greek silver piece is generally considered one of the world's most beautiful coins. It was struck about 412 B.C. in Syracuse to commemorate the victory of the forces of Syracuse over the invaders from Athens.

time of the war with Lydia, only lumps of gold were used as money. Cyrus adopted Croesus' method of making the Lydian coin. Instead of Croesus' coat of arms on both sides, Cyrus put on the coins a picture of himself with bow and arrow as a symbol of his might and strength.

The gold and silver of Lydia made the empire of Persia, but it could not prevent its downfall. On the contrary, it might have hastened it. Alexander the Great, in 334 B.C., set out to conquer Persia. The war lasted for four years, but he finally defeated Persia and established his own empire, reaching from the Adriatic Sea to the Nile. Only the money he coined or had made in twenty authorized places provided his empire with currency.

We have said that using certain weights

**Did the invention of coins prevent cheating?**

of metal as money invited cheating by giving wrong weights. No

sooner had coins been invented, than dishonest people found a way to replace the cheating in weight — they counter-

feited the coins. After trust was established in a piece of metal with a design on both sides, these people falsified the design and put it on inferior metal. Lead, for instance, was much cheaper than silver. A forger could get a great deal of lead for little money, he could make coins out of lead that looked like the silver ones, and he used the counterfeit coins to get real money or goods. Other people cheated by scraping metal from the rim of the coins. The coin did not look very different than before and the change was not easily detected. Today, the raised and milled edges of our coins make scraping without being detected impossible. Some counterfeiters drilled holes in the coins, removed the metal from the inside, and left only a shell of good metal, which they then filled again with inferior metals.

Dishonest persons, however, were not the only ones who cheated the honest man of his money. Governments constantly needed money to conduct wars, pay debts, or to keep the ruling monarchs in luxury. One of the earliest known cases of a government's cheating was in Rome in the first century B.C. The main mint at the time was in the temple of the goddess Juno, the wife of the highest Roman deity, Jupiter. She



Silver denarius from 1st century B.C. shows the head of the goddess Juno on the obverse side and her temple in Rome on the reverse side.



was the goddess presiding over marriage and women. She had the byname *Moneta*, which means the adviser, the counselor. It is from this Juno Moneta that our words, money, monetary, mint, the French word, *monnaie* (which means small change), and equivalent words in many other languages are derived. If Juno counseled to anything, it was not honesty in making coins! The silver denarius was supposed to consist of genuine silver with the head of Juno on one side and the temple on the other. Actually, it was coined in copper and covered with thin strips of silver, which were stamped with the designs. When they were freshly minted, nobody noticed the difference, but after a time, the silver wore off, and the copper showed through. When this procedure became known, the neighboring tribes refused to accept these coins and would trade only with older coins which had a different design, and which they were convinced had the proper content of silver. What they did not know was that the Roman coiners were skilled enough to put the old design on newly made coins, which were silver-plated copper and not pure silver, as supposed. The practice of the Romans was imitated for centuries all over the world.

When the Holy Roman Empire lost its might and disintegrated into many small and independent states in Europe, the rulers of these states tried to get revenue and fame by creating their own coins. Monetary confusion and instability mounted as the contents of precious metals varied from country to country. Some governments demanded that foreign coins had to be exchanged for their own money when entering their country, and the official, or unofficial, money-changers again had a chance to cheat the merchant and little man.

One of these newly created coins, however, excelled in design and stability of metal content and consequently earned the trust of the people. This was a silver piece first coined for the Counts of Schlick early in the sixteenth century and later for German and Austrian kings and emperors. It was called *Joachimsthaler* after Joachimsthal, the place in Bohemia where the silver was mined and the mint stood. As the name was too long, it soon became shortened to *Thaler*, and as such, it started its travels through Europe, well received wherever it appeared. Its name changed phonetically according to the language

**What is the origin of the word "dollar"?**

grated into many small and independent states in Eu-



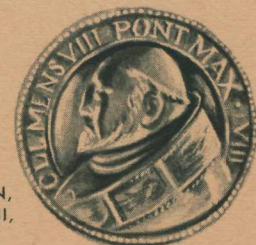
SILVER PENNY OF EDWARD THE CONFESSOR (A.D. 1042-1066)



CHARLEMAGNE'S SILVER DENIER, A.D. 8TH CENTURY



GOLD DUCATO DOPPIO, MILANO, ITALY, 1481



PAPAL GOLD COIN, POPE CLEMENT VIII, 16TH CENTURY

of the country. When the German Reich authorized the coinage, they were called *Reichsthaler* in countries where German was spoken. They became *rigsdaler* in Scandinavia, *rijksdaalder* in Holland, *talar* in Poland, and in the late 18th century, *dollar* in America. (*Thaler* — *taler* — *daler* — *dollar*.)



JOACHIMSTHALER (FIRST MINTED IN 1525 IN BOHEMIA)

Another coin that was generally accepted outside its actual political domain was the Spanish milled "piece of eight," so called because the figure eight, representing its worth of eight *reals* was stamped on it. This coin, brought into the Spanish colonies in the Americas, became the principal coin for the early settlers and was known as the Spanish

What are "two bits" and "four bits"?



SPANISH MILLED DOLLAR (PIECE OF EIGHT)

dollar. As money for change was scarce in the seventeenth century, some ingenious settler cut the Spanish dollar in half and then in quarters. As the whole dollar was worth eight *reals*, half of it was worth "four bits" or four small pieces (50¢ today), and a quarter of the coin was worth "two bits" (25¢ today).

Cutting money to make change was not an exclusively American invention. It is believed that it started in England during the Middle Ages. Pennies created in the early eleventh century had a cross on the reverse side of the coin. It was easy to cut along the horizontal arm of the cross and make two coins out of the one. If smaller change was needed, one could cut once more through the vertical arm and make four pieces out of the original coin. It is believed that this was how the British ha'penny came into existence. It was once really half a penny, and the farthings were once really "fourthings," one-quarter of a penny.

As you have read, the early settlers of the United States used nails, gunpowder, furs, bullets, fish-hooks, and tobacco

for trade among themselves. They used wampum for their trade with the Indians. If they could get any, they also used Spanish dollars and English shillings, which were coined in England but were the official money of the Colonies. From 1652 until 1672, the Colony of Massachusetts minted its own coins, among them the famous pine tree shilling, which was valued at about three-quarters of the value of the English shilling,

COINS OF EARLY AMERICA



PINE TREE SHILLING,  
1652



NEW CONSTELLATION CENT,  
1783



OAK TREE  
SHILLING,  
1652



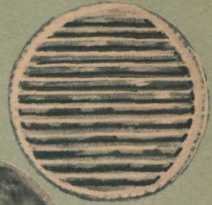
EXCELSIOR CENT, 1787,  
DESIGNED FOR N. Y. STATE



SOU, 1721, 1767.  
FRANCE MINTED THESE PIECES  
FOR USE IN CANADA AND  
LOUISIANA TERRITORY



BAR CENT,  
1783



NEW JERSEY  
CENT,  
1786



\$50 gold coin, privately minted in 1851 and called  
the "California Slug."

as it contained a smaller amount of silver. John Hull, a gold and silversmith in the Massachusetts Bay colony, was selected in 1652 by the General Court to manage the newly established colonial mint. With his partner, Robert Sanderson, he coined crude oak, willow, and pine tree shillings in addition to two-, three-, and six-pence pieces.

The first coins of the United States were authorized by Congress in an act of April 2, 1792, which provided for the establishment of the mint, the place where metal money is produced. This act also directed the issuance of the following coins:

Gold: Eagles (each of the value of ten units or dollars), half-eagles, quarter-eagles;

Silver: Dollars, half dollars, quarter-dollars, dimes and half-dimes;  
Copper: Cents and half-cents.

Many changes in the laws governing coinage in the United States, and in the coins themselves, have been made since the original act of 1792. Half-dimes and half-cents no longer are issued. At various times, coins in the 3-cent denomination have been issued; they were first authorized in 1851. A 20-cent piece was coined for a time beginning in 1875. A 2-cent piece was coined from 1864 to 1873. The 5-cent coin was introduced in 1866. Gold coins are no longer minted in the United States.



The Fugio penny of 1787 was the first coin issued by the U.S.A. It carried the

inscription "Mind Your Business," a phrase ascribed to Benjamin Franklin.

On the suggestion of the Rev. Mr. Watkinson of Pennsylvania in 1861, Salmon P. Chase, the Secretary of the Treasury in Lincoln's



Cabinet, ordered the director of the mint in Philadelphia to conceive a motto for our national coins to show the trust of the American people in God. The familiar form of the motto "In God We Trust" first appeared in 1864 on a 2-cent piece. The wording had been proposed by Chase himself. The use of the motto was interrupted and it did not appear on all coins of all series until decreed by law on July 11, 1955.

NEW JERSEY CENT,  
REVERSE



The legend "E Pluribus Unum" which means "Out of many, one" first appeared on the New Jersey cents minted from 1786-88. Ever since 1864, all U.S. coins have carried this Latin inscription. By placing this reminder on coins, Congress emphasized the need for the cooperative effort of all citizens. It also stressed that

the United States was formed of many nationalities with different political and social groups, all working together to build one great nation.

The United States coins now in circulation are the silver dollar; other silver coins in denomination of 50 cents (half

Early U.S.A. coins, collector's items, among which the five-dollar gold piece is one of the most valuable because only three are known to exist today.



HALF-CENT, 1793,  
OBVERSE

LARGE CENT, 1796,  
OBVERSE

HALF-DIME, 1793,  
REVERSE

THREE-CENT (SILVER),  
1851-1873, OBVERSE

dollar); 25 cents (quarter-dollar); 10 cents (dime); and minor coins in denominations of 5 cents (nickel), and 1 cent (bronze). No silver dollars have been coined since 1935. Gold coins are no longer produced to be used as a medium of exchange in this country.

In our modern economy, the coin as a medium of exchange or as a measure of value has lost its meaning. Today, all over the world, a coin is important only to make change.

Our silver coins are made from pure silver alloyed (mixed) with copper at the ratio of one hundred

parts copper and nine hundred parts silver. Silver by itself is too soft for coins, and must be mixed with some other metal to wear well. The United States 5-cent piece is made from an alloy of 75% copper and 25% nickel, and the bronze cent is made from an alloy of 95% copper and 5% zinc and tin.

When the mixtures are properly balanced, the metals then go to the melting furnaces where they are brought to a boiling liquid. After that, the metals are poured into molds, allowed to harden, and then rolled into thin strips in the rolling mills. This thinning procedure is repeated until the strips have been flattened down to the proper thickness for the coin intended.

From these strips, planchets, or

blanks, are cut on a press. After the blanks are punched out of the strips, they are fed through a furnace again. This softens them for the stamping machines. The blank pieces are next placed in the tumbling barrels where they are tumbled in a chemical solution to polish them and to take off the rough edges.

Now the blank disks are put through the milling, or "upsetting," machines. Here the edges are rolled back, or "upset," to keep them from wearing out too quickly. The blanks are next taken to another room for inspection. Those that are found to be defective are removed from the others, and are re-melted. The

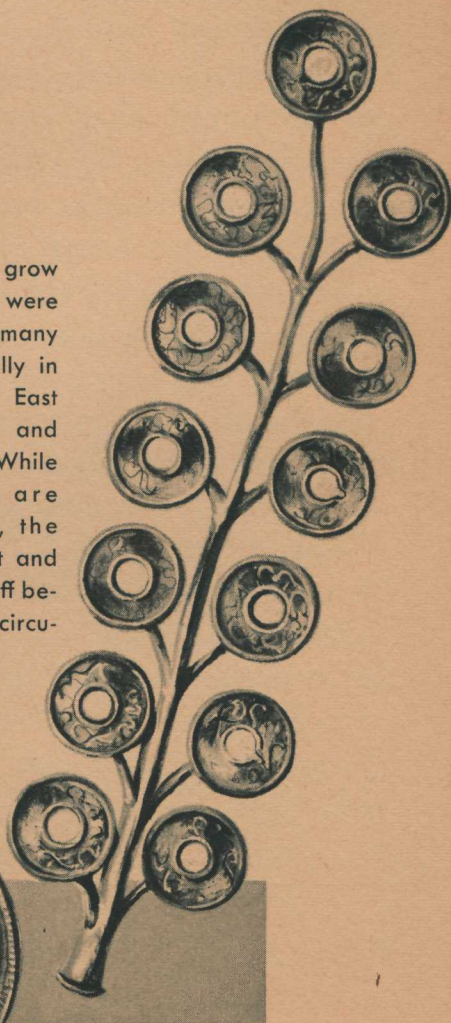
good blanks are then stamped on both sides with dies under a pressure of one hundred tons a square inch. The edges, in the same process, are roughened, or reeded, to prevent dishonest people from chipping off some of the silver from the coins.

Finally, the coins are counted automatically by machine, very rapidly. At the same time, the shiny pieces are poured into bags. In the case of all coins, the bags are immediately sealed, and then delivered to huge vaults. From here, the coins are distributed to banks in such amounts as the business of the country may require.

## Paper Money

We have seen how coins served for a long time quite satisfactorily as a medium of exchange and how the existence of the coins made trade easier. As trade became easier, people traded more — with each other and with people in different cities and even countries. Huge sums of money changed hands and had to be carried or sent from one place to another. It became increasingly cumbersome to transfer large quantities of coins, and there was always the danger of loss or robbery.

Money does not grow on trees, but there were "money trees" in many countries, especially in Asia. Japan, the East Indies, Malacca, and others had them. While modern coins are usually die-cut, the "trees" were cast and the coins broken off before being put in circulation.



THREE-CENT (NICKEL),  
REVERSE, 1865-1889



HALF-EAGLE  
(\$5 GOLD), 1822

RIGHT, SILVER DOLLAR, 1804, OBVERSE. A RARITY, AS ONLY A DOZEN OR SO ARE KNOWN.





Clay tablet from the 25th century B.C., an early Babylonian "due bill," a written acknowledgment of indebtedness.

Oriental bronze token from 13th century A.D.



Paper money in the past was usually a simple symbol of worth. Like the Babylonian clay tablet and the Oriental bronze token, it was a statement (on paper) that the acknowledgement of indebtedness or the promise of payment was backed up by the fact that a standard commodity of recognized value was safely stored somewhere.

People started to use paper notes instead of metal coins. Instead of sending metal to the seller of some merchandise in another city, a buyer would go to the bank in his own city, deliver the metal money to the bank, and receive a "bank note" that stated that the money was received by the bank and was being held for the holder of the note. That bank note was as good as coins and the buyer could send it to the seller, who might give it to somebody else as payment. Whoever had the note knew he could always get the gold or coins for it on demand from the bank where it was originally deposited. More and more notes of this kind were used by traders. The paper money we use today serves basically the same purpose. Today, such notes are not issued by banks.

Credit means getting something of value for a promise to pay for it later. The word "credit" comes from the Latin *credere* which means "to believe" or "to

**What is credit?**

trust." When a person buys something for which he is to pay later, he is said to have received credit because the seller believes that the buyer can be trusted to pay what he owes at a future date.

When we borrow a cup of sugar from the lady next door, she is extending credit to us. Also, when we borrow money from a bank, that bank is giving us credit. Credit may, therefore, be received in money, or other valuables, including goods or services.

A note with the promise to pay takes the place of money at the moment. The use of paper money began much the same way.

The Chinese were using paper money when Marco Polo, a famous Italian trader, visited their

**What is the oldest paper money we know of?**

country in the thirteenth century. Marco was persuaded to remain in the service of Kublai Khan, the ruler of that distant land, which was then largely unknown

to Europeans. He traveled extensively throughout the East, and returned at last to his own country with many stories of the wonders of the Orient. As early as A.D. 1273, according to Marco Polo, the Chinese Emperor issued notes printed on mulberry paper. Each was stamped with the red seal of Kublai, and signed by his treasurers.

The oldest paper money of which a specimen is known to exist is the "Kwan" note first issued in China in A.D. 1368. It was eight and one-half by thirteen and one-half inches, or about as large as a page of this book.

Marco had earlier expressed his amazement upon discovering that these people had paper money. "Whereas," he said, "our alchemists dreamed of turning cheap metal into gold, the Chinese Emperor had found a better way by merely turning paper into money." The term "alchemist" referred to those who studied or practiced an elementary sort of chemistry during the Middle Ages.

Paper money in Europe grew out of the use of letters of credit, which had been utilized in China centuries earlier as an insurance against

**What was one reason why paper money was introduced in Europe?**

use of letters of credit, which had been utilized in China centuries earlier as an insurance against

robbers. A letter of credit then, as today, was generally issued by a bank, and addressed to another bank in a different city or foreign country. Such a letter gave a person in whose favor it was made out the right to get funds at a bank or other institution mentioned. The specific amount of money or credit to be made available to the traveler was stated. When he used this letter of credit, the amount he got was entered on the letter as a record to show how much was yet due him.

During the Middle Ages (A.D. 500-1400), both in Europe and in China, the countryside and the trade routes were infested with robbers. Metal money was what these thieves wanted, not pieces of paper that they could not use. Accordingly, instead of carrying coins from one place to another for trading purposes, it was much safer and more convenient for travelers to carry letters of credit. These letters are considered the ancestors of our modern paper money.

Precious metals did not lose their importance in various monetary systems throughout the world with the introduction of paper money. Great Britain, in 1821,

**What is the "gold standard"?**

importance in various monetary systems throughout the world with the introduction of paper money.

Scenes like the one shown at right were common sights during the Middle Ages when the trade routes were infested with robbers.



put its money on the gold standard, which means that the government guarantees that the paper money issued can be exchanged at any time for a fixed amount of gold. Other countries, at least until 1870, were on the silver standard, redeeming bills in a fixed amount of silver. Some countries had a bimetallic standard, exchanging in either silver or gold. About the end of last century, practically every country, including the United States, had adopted the gold standard. On all United States' paper bills was the imprint that the amount of dollars stated on the bill had to be paid in gold to the bearer on demand. When the public started to lose confidence in paper money during the depression of the late 1920's, more and more people tried to redeem their money in gold. This would have exhausted the gold reserves of the banking systems, and so one nation after the other went off the gold standard. In 1933, we left the gold standard and determined the worth of the dollar at 59 cents as compared to its gold standard worth. Most other countries followed this example.

Gold, however, is still used to settle accounts between nations and is held in the United States to back up the Federal Reserve Bank's notes, but no other paper money. The word of the Government and its power to collect taxes are enough to keep up the trust in the value of the bills issued by the Government. The one exception is the one dollar silver certificate. If you read the printing on one of the bills, you will see "Silver Certificate" on its upper edge and "One Dollar in Silver Payable to the Bearer on Demand" at the bottom.

Paper money, as well as coins, is accepted in exchange for goods and services because

**Why is paper money accepted?**

its value has been established by the government, and people have confidence in the government. That confidence may come partly from the store of gold and silver held by the government for international payments. However, the confidence that we have in U.S. money is based mainly upon the stability of the Government, and the belief that the values placed upon money by the Government will not change too quickly. We are, therefore, glad to accept paper money in exchange for services or for goods. Others, similarly, are willing to accept that money from us because they also believe that the money will continue to be a medium of exchange for things that they desire.

The Declaration of Independence had been signed in 1776 by a Congress representing the American colonies. They had revolted against the English rule. The thirteen colonies were now linked together in the United States. But there remained five or more years of struggle before complete victory would be theirs. Meanwhile, the Congress had no real authority, and had to beg the states for soldiers and currency to wage war against the English.

The Government of the United States, under those circumstances, needed its own money. "Continental" bills were issued, even though the Congress had no power of taxation. But the

**What was Continental money?**

been signed in 1776 by a Congress representing



states failed to make their contribution toward the support of that money. Consequently, even though they were accepted in most states, Continental bills rapidly went down in value. There was no strong authority such as exists in the present Federal Government, or gold and silver backing, to create confidence in this money. "Not worth a Continental" became a common expression, and finally, the equivalent of one dollar in that currency was worth only one penny.

The present system of United States

**When did the present system of U.S. paper money begin?**

paper money began with the Civil War. Prior to the Civil War, the only acceptable U.S. paper cur-

rency consisted of notes issued by banks under the permission, or charter, of the Federal authorities or the state governments. (Today, besides the Government, only one bank, the Federal Reserve Bank, is authorized to issue bank notes. For the values issued by this bank, the countervalue in gold is held by the Federal Government.)

The first paper money issued by the Government of the United States consisted of Treasury notes authorized under acts of July 17 and August 5, 1861, and February 12, 1862. These notes were in denominations of \$5, \$10, and \$20.

The Treasury is a branch of the United States Government created for the purpose of supervising and managing the country's finances.

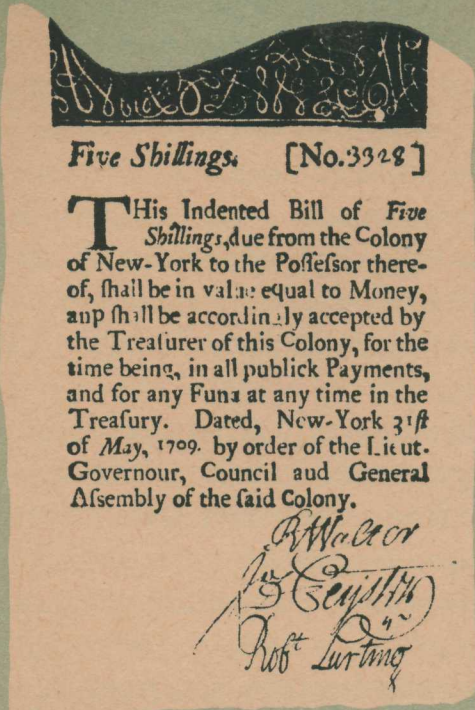
**What is the U.S. Treasury?**

One of the many branches of the department is the Bureau of Engraving and Printing, where paper money and other Government papers are printed. The Bureau of the Mint, where coins are made, is another. The Secret Service, which, among various other duties, guards against counterfeiting, is also one of the several bureaus operating in the Treasury Department of the United States.

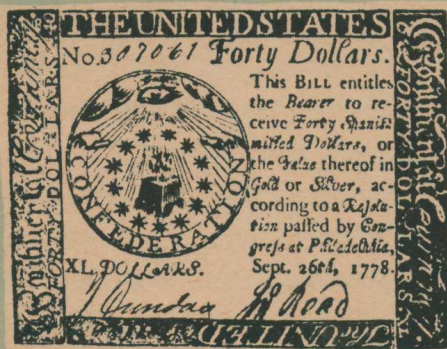
The Treasury story goes back into the smoke and fury of early Revolutionary War strife when the Continental Congress assembled at Philadelphia to consider the difficult problem of providing funds to carry on the struggle for American freedom. On April 1, 1776, Congress resolved that a Treasury Office be set up.

Our forebears were wise in demanding the most efficient possible handling of public finance. The basic working structure of the Treasury has been adaptable enough to meet day-to-day needs of the Government as the United States grew and expanded.

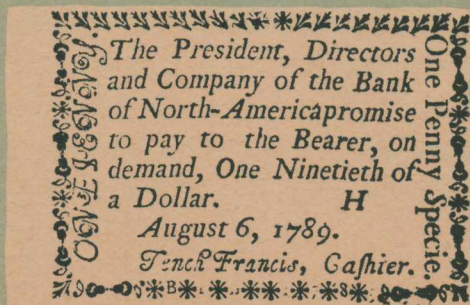
The Treasury Seal is imprinted on all United States money and on official Treasury documents. The circular design of the Seal is dominated by a shield upon which appear the scales of justice, and thirteen stars for the original states. The Latin inscription reads *Thesaur. Amer. Septent Sigil.*, signifying "The Seal of the Treasury of North America." The wording, "North America," is a relic from the days when it was hoped that Canada would become part of the United States. On different types of paper money, this seal is a different color.



Paper money issued in 1709 by the New York Colony.



\$40 Continental note.



Odd denomination note issued by the first bank chartered by the U.S.A.

An act of February 25, 1862, authorized an issue of United States notes, or "legal tender," popularly referred to as "greenbacks," in which the following denominations appeared: \$1, \$2, \$5, \$10, \$20, \$50, \$100, \$500, and \$1000. "Legal tender" today is any kind of money which has been designated by law as acceptable in payment for goods and services in a particular country. If, for example, you offered a Canadian dollar bill to pay for an article in a drug store, the clerk could refuse to accept that kind of money because it has not been designated by law as legal tender in the United States. Similarly, a Canadian citizen, doing business in his own country, need not accept American money because that money is not legal tender in his country.

The Government makes money legal tender by defining that money which a creditor must accept to cancel out a debt. Congress, in 1933, provided that "all coins and currency of the United States be legal tender for all debts, public and private . . ."

The designs used on our paper money, including selection of portraits, are the responsibility of the Secretary of the Treasury who acts with the advice of directors of other bureaus, including the Bureau of Engraving and Printing. By tradition, portraits used on our present paper money are those of Americans, usually Presidents of the United States whose places in history are well-known to the American people.

**Who chooses the designs for paper money?**

The first regular issue of the United States currency, the Treasury notes (commonly known as demand notes) issued in 1861, carried on the \$5 bills the portrait of Alexander Hamilton, first Secretary of the Treasury under George Washington. The portrait of President Abraham Lincoln was on the \$10 bills of the same issue.

When a new note has been ordered by Congressional action, a model is designed by an artist in the Bureau of Engraving and Printing.

**How are dies and plates for U.S. paper money produced?**

The model must be approved by the Secretary of the Treasury. The design is reproduced in soft steel by engravers. Separate portions such as the portrait, ornaments, and lettering are engraved by specialists.

The finished engraving, known as a die, is heated in cyanide of potassium, and then dipped in oil or brine (salt solution) to harden it. The die is next placed on a press, and under heavy pressure, a cylinder of soft steel is rolled over it. The engraving is thus transferred to the roll of soft steel.

The steel of the roll is hardened and the design is again transferred to soft steel plates. These plates, with the de-



\$1 bank note, 1854.



U.S. demand note, 1861.



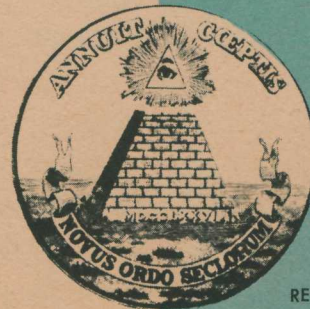
\$2 silver certificate, 1896.



U.S. legal tender note, 1862, the "Greenback."



GREAT SEAL OF THE U.S.A.,  
OBVERSE



REVERSE

sign of the original die upon it, are hardened and cleaned. Now the plates are ready for the printer. The original die may be used to produce numerous rolls, and each roll is available to make additional plates as those in service become worn.

Paper currency (\$1 bills, Series 1957,

**How is  
money printed?**

for example) is produced on nine high speed presses in the Bureau of Engraving and Printing. Each press requires only one printing plate. Each plate prints one sheet of notes. Upon completion of the back and face printing, stacks of these sheets are trimmed to a uniform size. Then the serial numbers, seals, series year, and signatures are printed on each note. The full-size sheets are then cut in half. A detailed examination is then made of each remaining sheet, after which the sheets are further subdivided into stacks of individual notes. The notes are then banded into units of one hundred each, and combined into packages containing four thousand notes each.

Other denominations and classes of currency are printed on different types of presses, and differently processed. But in any case, an assembly line production of all paper currency has simplified the whole operation, bringing about a high degree of efficiency in its manufacture.

United States paper money is printed on special paper. High standards and processes in the production of this paper make it most difficult, or almost impossible, for others to use it for illegal pur-

poses. It is made of linen and cotton and it contains small segments of red and blue silk fibers which are embedded during the process of manufacture. The method by which it is made is kept secret. The paper is produced by a commercial firm operating under strict Government control.

All inks used to print United States pa-

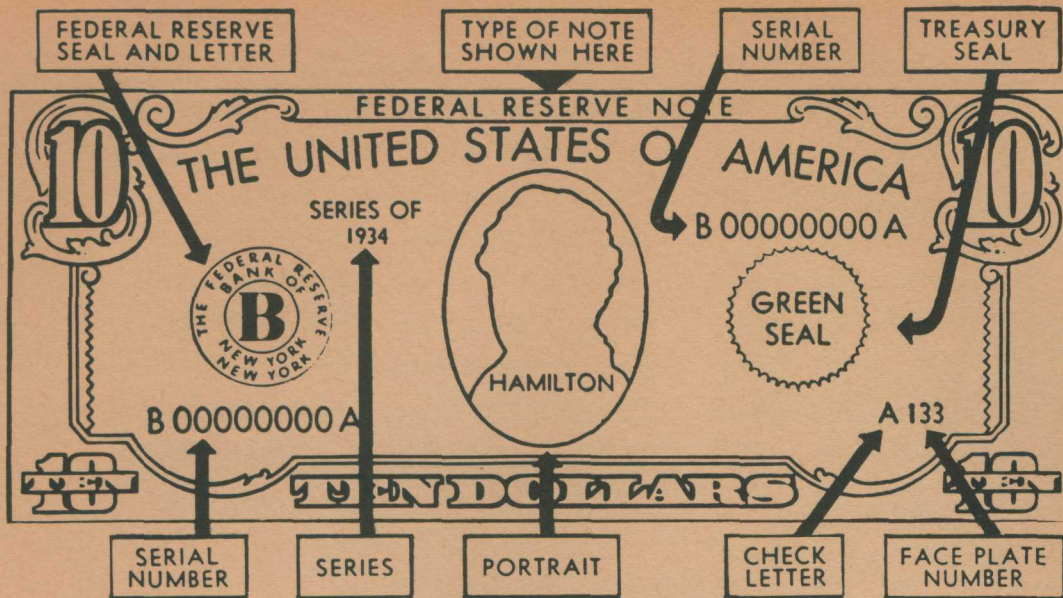
**Are paper bills  
printed with  
special ink?**

per money in the Bureau of Engraving and Printing are manufactured in the Bureau itself. The inks are produced by blending dry colors, oils, and other chemicals of the highest obtainable quality. The ingredients are placed in huge mixers. The ink mixtures are put under extreme pressures between steel rollers to assure a product of proper texture. A test is made of each new batch to make sure that it conforms with the standards established by the Bureau laboratory before any of the ink is used for printing.

There are three types of currency now being furnished to

**What paper  
currency is  
issued in  
the U.S.?**

banks for circulation: silver certificates, United States notes, and Federal Reserve notes. Silver certificates, with the Treasury Seal in blue, are issued in denominations of \$1, \$5, and \$10. United States notes, with the Seal in red, are issued in \$2, and \$5 bills. Federal Reserve notes, with the Seal in green, are issued in the following denominations: \$5, \$10, \$20, \$50, \$100, \$500, \$1000, \$5000, and \$10,000.



The diagram shows the position of the important features of paper currency.

You may question the significance of the star that appears in front of the serial of some pieces of United States money. When a note is mutilated in the course of manufacturing, it has to be replaced. To replace it with a note of exactly the same number as that on the imperfect specimen would require the use of a special machine, and would be costly and delaying. "Star" notes are substituted instead. Except that they have their own special serial number and a star, these notes are the same as the others, and, of course, worth the face value.

Paper currency of the present size was first issued in July, 1929, replacing larger notes. The old notes were about one-third larger than those you have today. The present size of a finished note is about 2.61 inches by 6.14 inches, and the thickness is .0043 inch. New notes will stack two hundred and thirty-three to one inch. Old currency, of which only a relatively small amount remains outstanding, is can-

**How big is a dollar bill?** first issued in July, 1929, replacing larger notes. The old notes

celed and retired when received by the Treasury through one of the banks.

If you have three-fifths, or more, of a bill, you may have it redeemed for full face value by asking a local bank to send it to the Treasury Department. Sometimes, a bill may be partly burned, or torn. If you have less than three-fifths, but clearly more than two-fifths, you may get back one-half of its face value. Fragments not more than two-fifths are not exchangeable, unless accompanied by satisfactory proof that the missing portions have been totally destroyed.

When paper currency becomes worn and no longer fit for general use, it is withdrawn from circulation, destroyed, and replaced by new notes. The worn-out notes are destroyed by burning. One dollar bills make up the bulk of the currency which has to be thus destroyed for unfitness. A one dollar bill lasts about a year as a rule, and more than a billion of them are in circulation.

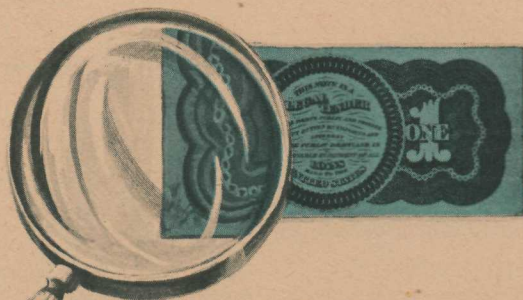
**Do we have "money to burn"?** is withdrawn

Higher denomination bills last longer because they are not used by people as frequently as the smaller bills.

The origin of the "dollar sign" (\$) has been variously accounted for. Perhaps the most widely accepted explanation is that it is the result of evolution, inde-

**What is the origin of the "dollar sign"?**

pendently in different places, of the Mexican or Spanish "P's" for *pesos*, or *piastres*, or pieces of eight (the Spanish dollar). The theory, derived from a study of old manuscripts, is that an "S" gradually came to be written over the "P," developing a close equivalent of the "\$" mark, which eventually evolved. It was widely used before the adoption of the United States dollar in 1785.



## Counterfeit Money

During the Civil War, in the United States, counterfeiters became very active, and put a vast amount of fake bills into circulation. Subsequently, the Secret Service, a division of the Treasury Department, was established July 5, 1865, to fight currency counterfeiters. (Later, agents of this organization were assigned to additional duties such as the protection of the President of the United States and his family.)

A counterfeiter is a person who prints imitations of the official money of the Government, and tries to circulate them as though they were genuine. He copies, or otherwise reproduces, what appears to be legal tender without permission of the Government. This fake money is then put into circulation as if it had the same

**What is a counterfeiter?**

value as the money issued under the auspices of the Treasury Department. Of course, the counterfeit money is entirely without value because no private individual has the right to make such reproductions of United States money. Accordingly, a person who accepts a counterfeit bill loses whatever he may have given in exchange.

The crime of making false money, which is offered with the pretense that it is legal tender, has existed for many centuries in various countries. Men were beheaded in ancient China for counterfeiting currency, and until late in the eighteenth century, death was the punishment in most countries for this illegal activity. Today, in the United States, anyone convicted of making, passing, or knowingly possessing counterfeit bills shall be fined not more than five thousand dollars or imprisoned not

more than fifteen years, or both. Similarly severe penalties are meted out for counterfeiting United States coins.

You can help the Secret Service by examining your

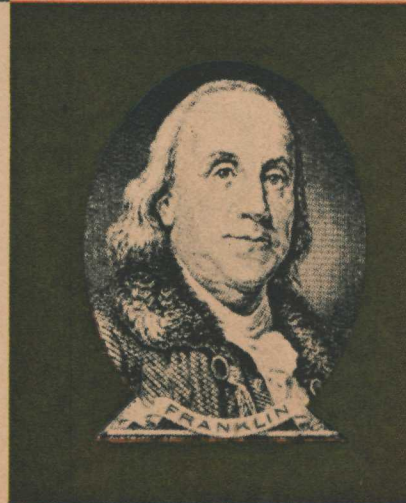
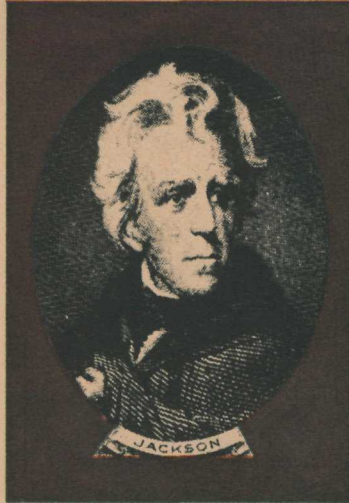
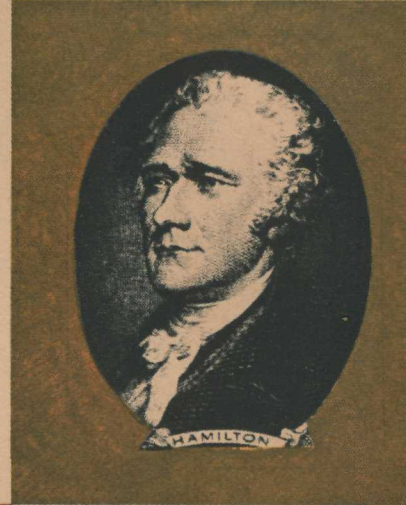
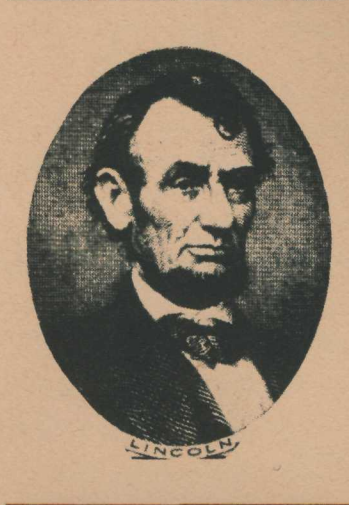
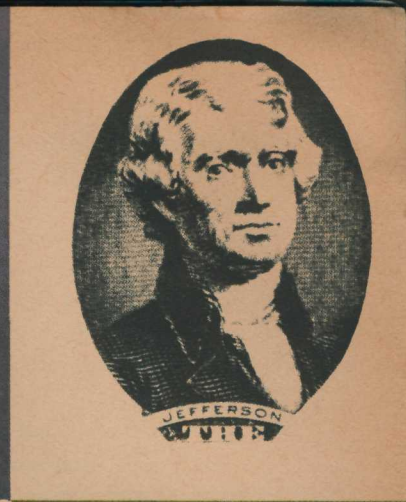
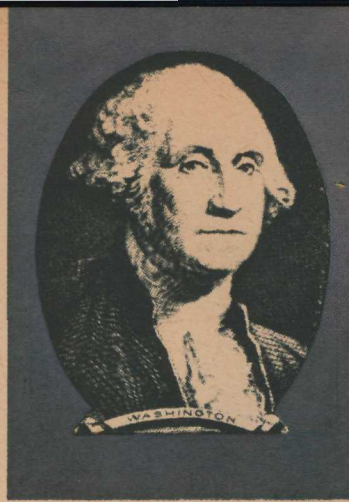
**How can you help  
the Secret Service?**

money more  
closely and, also,

by knowing some of the characteristics of counterfeit currency. Every year, people are cheated out of huge sums by passers of counterfeit bills. A person may purchase a dollar article with a counterfeit ten dollar bill. The storekeeper will give him the article, plus nine dollars in change. The counterfeiter has then not only merchandise worth one dollar, but also the nine dollars which he received in change. The storekeeper is left with nothing but a fake and worthless ten dollar bill.

Counterfeiters must fool somebody to make a profit. Storekeepers, banks, and the average people who fail to examine their money are often to blame for their own loss.

Portraits of great Americans appear on United States paper currency. It is important for your own protection to know on which bills the portraits appear. You should be especially familiar with the bills you are most likely to handle more often, the \$1, \$2, \$5, \$10, and \$20 bills. Bills are sometimes fraudulently raised to represent larger denominations. A bill, for example, might be manipulated by just altering the amount printed on it. If you get a \$10 bill with the picture of George Washington, you should know that the bill was tampered with; the \$10 bill should have Hamilton's portrait, while Washington appears on the \$1 bill. All bills of the same denomination bear always the same portrait as follows: George Washington on \$1 bills; Thomas Jefferson on \$2 bills; Abraham Lincoln on \$5 bills; Alexander Hamilton on \$10 bills; Andrew Jackson on \$20 bills; Ulysses Grant on \$50 bills; Benjamin Franklin on \$100 bills; William McKinley on \$500 bills; Grover Cleveland on \$1,000 bills; James Madison on \$5,000 bills; and Salmon P. Chase on \$10,000 bills.



Genuine money looks good because it is made by experts. It is produced on costly machines designed for the purpose and printed from steel plates produced by the finest engravers in the country. No counterfeiter ever has duplicated the artistic work of the highly skilled craftsmen of the Bureau of Engraving and Printing.

A genuine engraved plate makes clear lines. The counterfeit money, on the other hand, is nearly always made from defective plates. Fake money is usually printed with comparatively cheap ink on cheap and different paper. If you are observant, you can actually see and feel the difference between genuine and counterfeit money.



## Banks

As we have seen, banks are very closely connected with the story of money. Although the story of banks and banking would fill another *How and Why Wonder Book*, we cannot complete our book about money without mentioning something about the history and functions of banks.

**What are the important functions of banks?**

In the second century before the birth of Christ, Mesopotamian priests (in the Middle East) guarded the treasures of their church and rulers in the temples. Gradually, the priests started to do the same for merchants, by agreeing to keep their money, as well. These temple treasuries became a sort of primitive bank which fulfilled one of the basic functions of banks, to take money and safeguard it.

We have learned that during the Middle Ages, people began to carry notes for their metal coins because the metal would not be safe on long journeys where robberies were common. Travel-

ers gave their coins to goldsmiths who could store them, and in return, the traveler received a note which could be used as money. Out of these notes developed the bank note. The goldsmiths soon discovered that all deposits were not called back at the same time. They could give out more bank notes than they had deposits, and still be able to fulfill their obligations. Thus, the second important function of the bank developed, to take and extend credit.

The history of a third function of banks goes back to money-changers. When coins became popular, so many authorities had the right to make them that it was difficult to determine the value of coins. Money-changers became a common feature in every market. They exchanged one kind of coin for another, gave coins in return for precious metals, or weighed and measured money to determine its value. The money-changers of a few hundred years ago charged a nominal fee for their services, but soon they, too, began to cheat, and





THE SAME PART OF COUNTERFEIT MONEY MAGNIFIED



You can learn to detect counterfeit coins by very simple tests. Drop the coin on a hard surface. Genuine coins have a bell-like ring; most counterfeit coins sound

dull. Feel the coin. A counterfeit coin, because it is usually made of lead instead of silver alloy, feels greasy. The edges of genuine coins (right) are even and regularly toothed; the edges of false coins (left) are usually fuzzy, uneven, or missing in spots.

the man on the street was no better off than he had been without them. Banks were set up to determine which coins were good and which were bad. Eventually, the simplest way to do this proved to be for the banks to make the money themselves. Usually, these bank coins were more reliable than local government coins.

From the old money-changers who carried on their business on a bench or table in the market place, we get our word, bank. The Latin word for bench is *bancus*, from which the English word, bank, was derived. During the sixth century in old Florence, it was the custom for a banker to break his bench or table when he was forced to go out of business. Accordingly, the word, bankruptcy, which signifies that one has insufficient funds to meet his obligations, comes from the Latin and means broken bench.

Today, the functions of the bank combine the jobs of the Mesopotamian priests (storing the money safely), the goldsmiths, and the money-changers. Banks — in the business of borrowing, lending, exchanging, and caring for money — have become an institution for dealing in money and credit.

In the United States, there are over fifteen thousand banks employing about half a million people. The billions of dollars and credit needed by the economy come largely from savings that have been accumulated in banks. Banks take these savings, plus their own capital, and put the money to work either through direct investments, or by lending funds and credit to other businesses and people. Through the banks, the currency minted or printed by order of the Treasury Department is distributed into business channels.

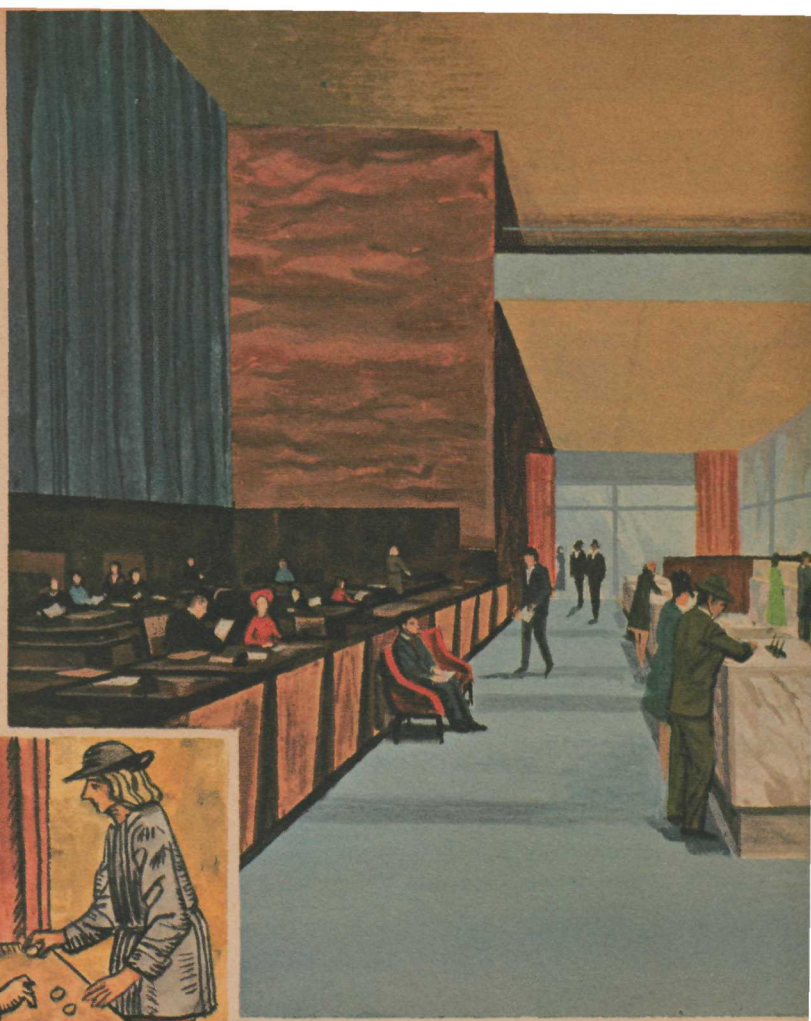
Anybody can start a bank in the United

**How is a bank started?** States if he can meet certain requirements established by law

A bank may be owned by one person, or a group of individuals. A bank has to have authority to operate, or carry on its business, through a "charter." This charter is the official permission granted either by the state or the Federal Government. In the United States, we are



In Mesopotamia, before the birth of Christ, priests guarded the temple treasures and the treasures of their rulers in special hiding places in the temples.



During the Middle Ages, travelers and merchants deposited their coins and precious metal with goldsmiths who had safe storage facilities. In return, they received a note which could be used as "money."



said to have a dual system of banking. Any bank with the word "National" in its title has been given a charter by the Federal Government. Any bank with the word "State" in its name has received its charter from one of the states.

Great precaution is taken to protect depositors' money, including the requirement that each bank must have a certain amount of capital before being granted a charter. Bank employees are screened carefully for their honesty. In large

**Why is your money safe in the bank?**

banks, armed patrols are kept in the halls and near the doors. Your savings are also insured against possible loss or theft up to \$10,000 by the Federal Deposit Insurance Corporation established in 1933. Beyond that amount, the bank's credit, including the ability to borrow from other banks, provides the main protection.

Banks are also supervised and checked regularly to make sure that their business is conducted according to regulations. The national banks are supervised by the agents of the Comptroller of Currency in Washington, D. C.

Today, the basic functions of the bank combine, among many more complicated ones, the functions of the priests, the goldsmiths, and the changers in respect to money.



When the authority to coin money became the privilege of many, money-changers became a necessity and a common feature in every market.



The state banks are supervised by the banking department of the state where they are located.

Finally, all banks are required by law to put away in reserve part of their clients' money to make sure that sufficient funds are always available to meet the needs of those who may rightfully demand their money.

Anyone can borrow from a bank if he is

**Who can  
borrow money  
from a bank?**

a good credit risk. A good credit risk depends on the character, the capacity, and

the capital of the one who is applying for a loan. These are known to bankers as the three "C's." If you walk into a bank and ask for a loan, the banker will most likely question you to find out something about your character, the

sort of person you are, your reputation, standards of honesty, and the traits that affect your relationships with other people.

Also evaluated is your capacity to make good use of the money or credit available to you in the form of a loan. Are you capable of paying back the loan because you have a good job? Have you built up, over the years, habits of industriousness and discipline?

Capital concerns the wealth you already possess when you are applying for a loan. It may be in various forms, including a house, a car, insurance, and other kinds of wealth. The capital you have acquired reflects your ability to save, and to pay back a loan.

If one is a good credit risk, it often pays to borrow money. If, for example, by borrowing \$2,000 you can start a

business, you may be able to pay back the loan, plus the interest charged by the bank, and still have your business to make a profit.

The compensation received for putting your money in a bank is called "interest." Banks are willing to pay for the use of money left in their care for a specified length of time. A bank is able to do this because it can invest your money, or lend it at a profit to someone else during the period when you have no need for it. This does not mean that if you put \$5 in the bank, officials of that institution immediately take that selfsame bill and seek to lend it at a profit to anyone who happens to come along. It does, however, mean that, since all depositors do not withdraw their money from the bank at the same time, a bank nearly always has funds on hand for investment, or lending, at a higher rate of interest than you, as a depositor, get for keeping your money in that bank.

When you put some money on "time

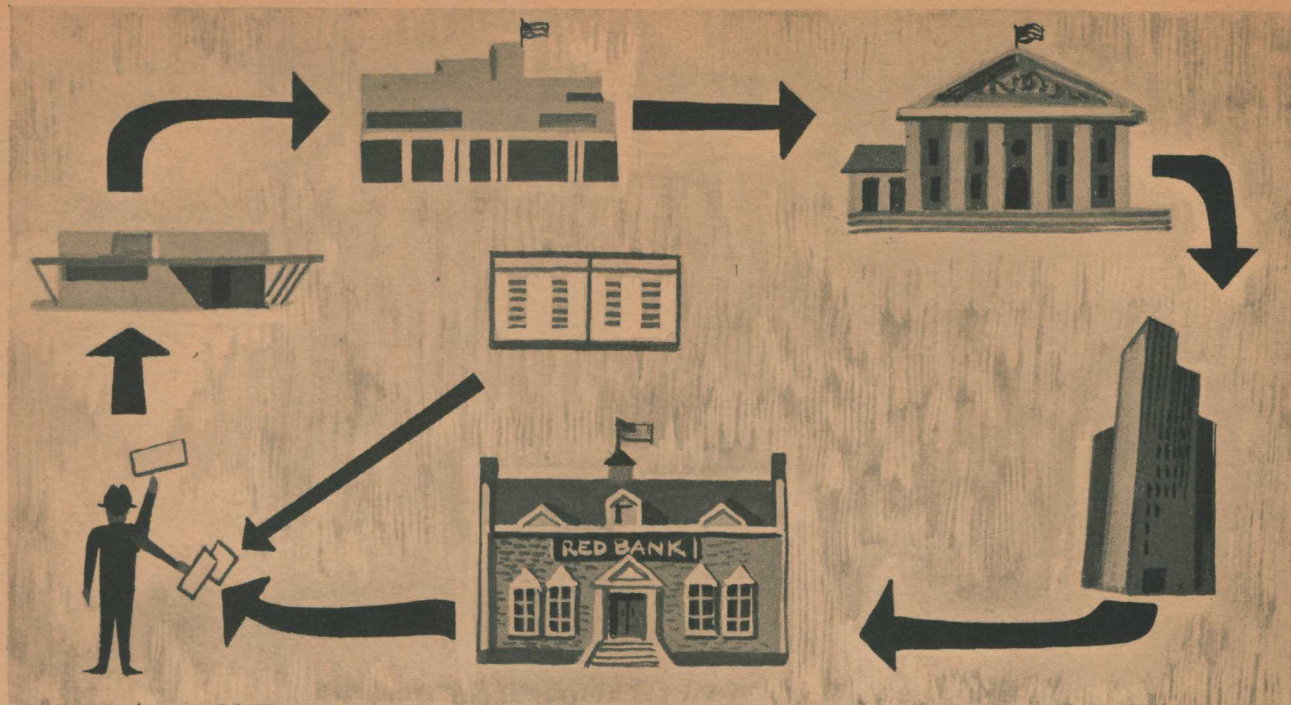
deposit," which means that your funds are deposited with the understanding that you cannot withdraw them at will, you are paid interest. Under this type of account, known as a "savings account," the bank reserves the right to require thirty days' notice before your money is to be withdrawn. In actual practice, however, funds in a savings account are paid voluntarily by the banks without such notice.

Savings accounts, or time deposits, accordingly, pay interest to depositors for the use of their money. In other words, as an example, if you put \$10 in a bank, you may find that this amount has grown to \$10.40 at the end of one year. The bank, in this situation, would have paid you 40 cents, or 4 per cent, for the use of your money during that year.

But if a person puts his money in "demand deposit," which means that his money is deposited with the understanding that he can withdraw it at will, no interest is paid by the bank. This is understandable because, for such ac-

A modern check form with symbols printed in magnetic ink for sorting and counting at the bank and clearing houses by means of electronic machines. The stub (at left) is held by the owner of the account for bookkeeping purposes.

No. <u>179</u>		CITY, STATE. <u>Dec. 15</u>		1964 No. <u>179</u>				
<u>Dec. 15</u> 1964		ANYTOWN BANK		50-226 213				
TO <u>John Q. Jones</u>				PAY TO THE ORDER OF <u>John Q. Jones</u>		\$ <u>150<sup>00</sup>/<sub>100</sub></u>		
FOR <u>Car repair</u>		<u>One Hundred Fifty and <sup>NO</sup>/<sub>100</sub></u> DOLLARS <u>John Q. Public</u>						
bal. bro't. for'd	Dollars					cents		
amt. deposited	<u>185</u>					<u>00</u>		
total	<u>200</u>					<u>00</u>		
amt. this check	<u>150</u>					<u>00</u>		
bal. card. for'd	<u>50</u>	<u>00</u>						
		⑆0213⑆ 02261⑆ 68 0055 211⑆		⑆02⑆ 00000 15000⑆				



Mr. White of Krumville, N. Y., who has an account with the Red Bank in Kingston, New York, mails a check in payment of a bill to his creditor, Mr. Black, in Miami Beach, Florida. Mr. Black deposits the check at his bank, the Green Bank of Miami, which credits his account with the amount. Green Bank now sends the check to the Federal Reserve Bank in Jacksonville, Florida, which, after clearing the check, sends it on to the Federal Reserve Bank in New York City, which, after clearing it, sends it to the Red Bank in Kingston, which debits Mr. White's account and sends the canceled check back with the monthly statement to Mr. White of Krumville.

The Federal Reserve Bank's function on an out-of-state banking level is that of a clearing house, which is like a banker's bank. Here, banks get charged for all checks the clearing house presents to them for payment and get credit for all the checks they send in.

counts, the bank must keep on hand the bulk of the deposits for possible immediate payment. Such funds are, therefore, not generally available to the bank for lending or investment.

A check is an order to the bank requesting it to pay money out of your account to somebody else. It is an order against your demand deposits, transferring some of your money to someone who has sold you things or rendered you services.

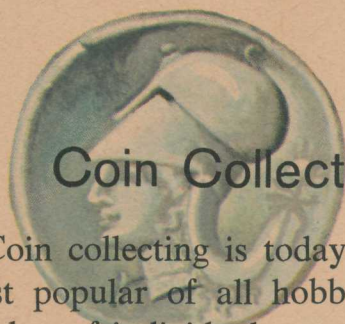
**What is a check?**

Today, millions of people have money in the banks. Those with checking accounts (demand deposits) are given checkbooks by the bank. When-

ever anyone has to pay money to someone, he may write out a check instead of paying in cash. Of course, the person writing the check must have on deposit in the bank at least as much as the check represents.

The check is an interesting device. With a few strokes of the pen to indicate the amount, and your signature, a check is generally accepted like money. It is really a piece of paper which may be used without the use of actual currency. In addition to being a convenient way to pay bills, the use of checks also results in a personal bookkeeping system for the depositor. This bookkeeping system is in the form of check stubs. After having filled in a check, a stub is

kept by the issuer on which he has listed the name of the person or firm in whose name the check was issued, the amount of money involved, the purpose for which it was issued, and finally, the amount still remaining in the checking account.



## Coin Collecting

Coin collecting is today one of the most popular of all hobbies and the number of individuals engaging in this fascinating pastime is fast increasing. It is also one of the most ancient hobbies. The Romans, some two thousand years ago, already collected Greek pieces because these were considered beautifully made and designed. The Popes of the thirteenth and fourteenth centuries were coin collectors, as were many kings and noblemen. Throughout history and until the present day, people have collected beautifully made and rare coins valued at thousands of dollars, and, also, interesting sets valued at a dollar or less.

Numismatics is the science of coins and medals, and a coin collector is called a numismatist. You do not have to study the science to start a collection, nor know all the phases of it, but once you get involved, you will discover a fascinating hobby. Wherever history was made, money and coins were involved, and a complete collection of

**What is numismatics?** medals, and a coin collector is called a numismatist. You do

### PORTRAITS OF HEADS OF STATE OF FOREIGN COUNTRIES



QUEEN JULIANA, NETHERLANDS, 25 CENTS



KING GEORGE III, GREAT BRITAIN, TWO PENCE (A "CARTWHEEL")



KING ALFONSO XIII, SPAIN, 50 PESETAS

FLYING HORSE (PEGASUS), ITALY, 10 LIRE



LION, EAST AFRICA, 1 SHILLING

### SOME "ANIMAL COINS" OF THE WORLD

### UNITED STATES COINS STILL IN CIRCULATION

LINCOLN CENT



INDIAN HEAD CENT



JEFFERSON NICKEL



ROOSEVELT DIME



WASHINGTON 25 CENTS



BUFFALO NICKEL



MERCURY DIME



LIBERTY STANDING 25 CENTS



BALBOA,  
PANAMA,  
1 BALBOA



QUEEN VICTORIA  
GREAT BRITAIN,  
HALF CROWN



KING LEOPOLD III,  
BELGIUM,  
50 FRANCS



EMPEROR HAILE SELASSIE,  
ETHIOPIA,  
50 CENTS



JAGUAR,  
URUGUAY,  
1 PESO



BEAVER,  
CANADA,  
5 CENTS



CHICKEN,  
IRELAND,  
1 PENNY

FRANKLIN  
HALF DOLLAR —  
WILL BE REPLACED  
BY KENNEDY HALF DOLLAR  
SHOWN ON TITLE PAGE



LIBERTY STANDING  
HALF DOLLAR



MORGAN DOLLAR



1915 PANAMA  
PACIFIC EXPOSITION  
HALF DOLLAR



1918 ILLINOIS  
CENTENNIAL  
HALF DOLLAR



1920 PILGRIM  
TERCENTENARY  
HALF DOLLAR



1921 MISSOURI  
CENTENNIAL  
HALF DOLLAR



1922 GRANT  
MEMORIAL  
HALF DOLLAR



1915 PANAMA  
PACIFIC EXPOSITION  
\$50 GOLD PIECE



1925 STONE MOUNTAIN  
MEMORIAL  
HALF DOLLAR



1928 OREGON TRAIL  
MEMORIAL  
HALF DOLLAR



1935 DANIEL BOONE  
BICENTENNIAL  
HALF DOLLAR

1936 ELGIN, ILLINOIS  
CENTENNIAL  
HALF DOLLAR



1946  
BOOKER T. WASHINGTON  
HALF DOLLAR



WOODEN NICKEL

U.S. commemorative coins can make a beautiful collection. We show you just a few of them. Special catalogues are available from the Superintendent of Documents.

coins of the world, or of a country, can be read like a history book. If you are interested in history, you will start by collecting whatever coins you can get. Coin collecting can become a very costly hobby, but it does not have to be so. You might begin with a coin from each country and then add others. You might start with collecting current coins and then try to get older ones. Some people are interested in coins for their design and the piece of art they represent. They might start collecting the coins that they consider especially beautiful. There are people who collect coins because they are interested in personalities and their likenesses. They might start collecting medals and coins with portraits of gods, kings, and whoever else was or is considered important enough to be preserved for posterity on a coin.

Whatever your interest, it is good to start by collecting a lot of coins. When you have acquired more knowledge and feeling for them, you can specialize. A very interesting specialization is a collection of United States coins, all coins, or even only one denomination, from every year. You will be surprised how valuable such a complete collection can be. You can even start immediately by looking at the years the coins in your pocket have been minted.

The age of a coin does not always set its value. Some coins of ancient Greece and Rome, for example, are sold cheaply today, while some United States pieces minted in 1914 sell for much more. The reason for this is twofold. There is more demand for the American coin from collectors, and fewer American coins of that year are available.

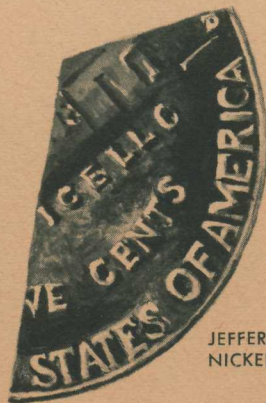
The value and desirability of a coin as a collector's item are determined by the answers to four questions: 1) How many coins of the particular issue were minted? 2) About how many of that issue have disappeared from circulation? 3) How much in demand is the coin to complete sets? 4) What is the condition of the coin?

In regard to how many of a particular issue were minted, information is available from books and magazines. For American coins, the Office of the Director of the Mint issues a booklet entitled, *Domestic Coin Manufactured by Mints of the United States*, which may be ordered for 20 cents from the Superintendent of Documents, Washington 25, D. C.

**How important is the age of a coin?**

**When is a coin a collector's item?**

BUFFALO NICKEL

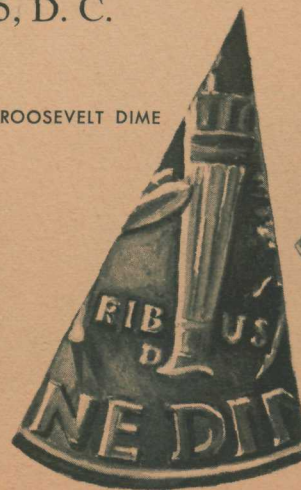


JEFFERSON NICKEL

MERCURY DIME



ROOSEVELT DIME



LINCOLN CENT



As for the second question, a number of coins are lost each year through fires, shipwrecks, floods, and carelessness. The supply minted in a given year tends to diminish, thus making those that remain rarer, and more valuable.

The popularity and, consequently, the desirability, of a coin at a given time tends to be gauged by the price quoted by coin dealers. The nation-wide popularity of a coin is also reported by magazines published to serve coin collectors and numismatists.

The condition of the coin is important in determining its value. This condition is classified in several categories. Here are the main ones: "Proof condition," as applied to United States coins, indicates that the coins have generally been put aside by the mint itself for the benefit of collectors. These coins may be obtained from your local bank. They are completely new, uncirculated, never handled except by mint employees, highly polished without any signs whatsoever of wear. They are generally still in their original wrappings.

Coins classified in "fine condition" have been circulated very little; lines

and eagle's wings are still clearly seen. Those considered "good" or "very good" are relatively unscratched, shiny, and not worn by too much handling, nor marred by excessive circulation.

As you progress with your hobby, you'll

**How should you clean coins?**

learn how to clean your coins. Be careful how the cleaning is done in order not to affect the basic condition of the pieces. A silver coin can be brought back to a lustrous gleam by using bicarbonate of soda. Rub gently, and then wash in clear water. Household ammonia is also effective in restoring sparkle to your coins. But, again, be careful not to rub too hard. These directions apply to comparatively new coins. Old ones should not be cleaned at all. You may damage them, and thus impair their value.

Ordinary copper coins are best cleaned by rubbing lightly with a cham- mois cloth and a little oil. Make sure that you remove only the surface dirt, not any of the copper itself.

Once you have begun your collection,

**How should you keep coins?**

you become concerned about storage. You can keep your coins flat on trays. Or you may

WASHINGTON QUARTER

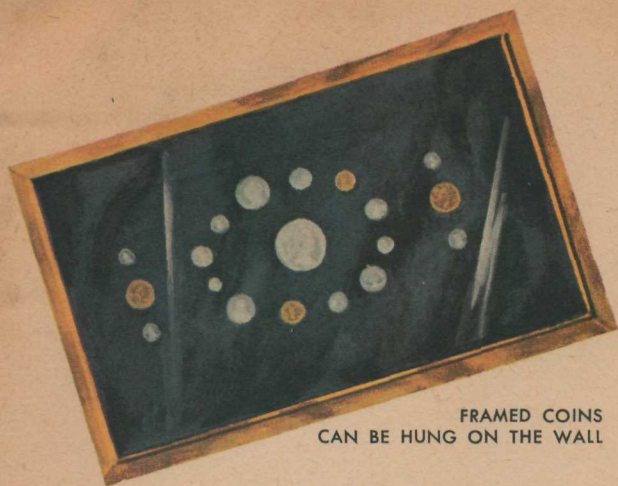


HALF DOLLAR (LIBERTY STANDING)



LIBERTY HEAD (MORGAN) DOLLAR

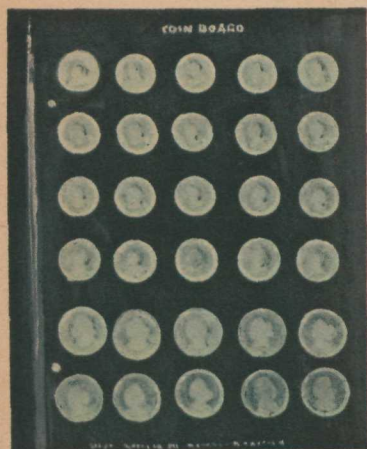
The illustrations on these two pages give you enlarged segments from U.S. coins to help you find the mint marks which are important for the collector; the value of the coin may depend on them.



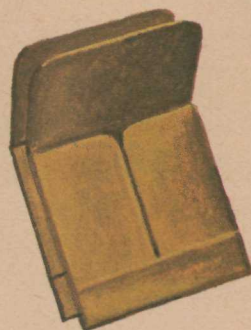
FRAMED COINS  
CAN BE HUNG ON THE WALL



COINS ON DISPLAY



COIN-HOLDER WITH  
ADHESIVE BACKING



COIN ENVELOPE



COINS IN  
ENVELOPES  
CAN BE STORED IN METAL BOXES

want the convenience of envelopes bought from dealers for storing the coins. These envelopes may be filed in small boxes, with the necessary information about each piece written on each of the envelopes. Of course, there are also the coin boards with plastic slides which enable you to inspect more easily both sides of the pieces. These may be purchased from gift shops and department stores or, if you are handy, you can make one yourself.

In this country alone, there are over 400 coin clubs, one of which you may want to visit for information.

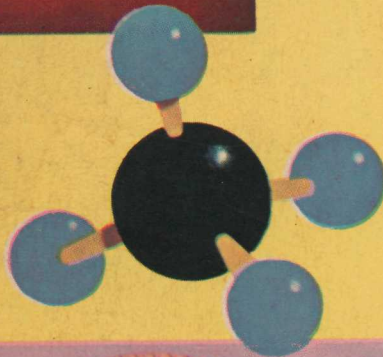
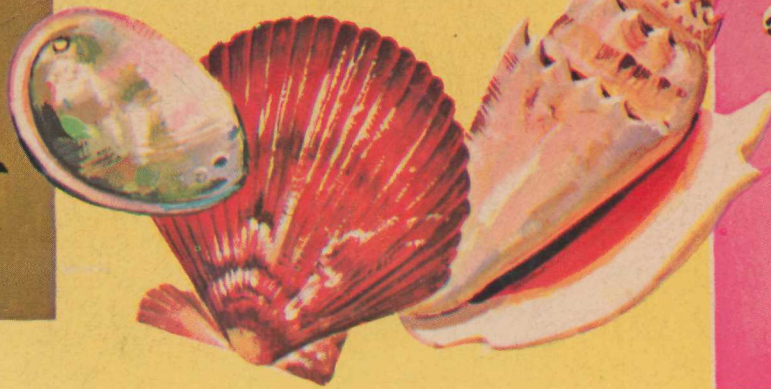
**Where can you get information about clubs?**

If you become a member, you can exchange some of your coins for others of greater importance to you at the time. Newspapers, hobby magazines, and the classified telephone directory will list local clubs and coin dealers.

The largest organization serving those interested in coins is The American Numismatic Association, reached at P.O. Box 577, Wichita, Kansas. There are more than thirty thousand members from every state, and from many foreign countries. The aim of the association is to promote and encourage the collection and the study of coins.

Of special interest to coin clubs and collectors is the Chase Manhattan Bank Money Museum containing more than seventy-five thousand specimens, one of the largest currency collections on display in this country or abroad. It is located in the RCA Building, Rockefeller Center, in New York City.





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